

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds

(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-3

Perfect score: 705

Sequence: 1 cccaggcgaggagcgc.....ggcgatcgagcgcgagcgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*

- 1: /cgn2\_6/ptodata/2/ina/5A COMB.seq:\*
- 2: /cgn2\_6/ptodata/2/ina/5B COMB.seq:\*
- 3: /cgn2\_6/ptodata/2/ina/6A COMB.seq:\*
- 4: /cgn2\_6/ptodata/2/ina/6B COMB.seq:\*
- 5: /cgn2\_6/ptodata/2/ina/PCTUS COMB.seq:\*
- 6: /cgn2\_6/ptodata/2/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	555	78.7	3447	2	US-08-313-185-57
5	555	78.7	3447	3	US-09-082-614A-57
6	541.4	76.8	970	1	US-08-250-030-1
7	541.4	76.8	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
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21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	454.4	64.5	706	3	US-08-797-812-25
27	367.6	52.1	4074	4	US-09-252-991A-4737

28	367.6	52.1	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.6	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
c 30	337.6	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	295	41.8	432	2	US-08-313-185-59	Sequence 59, Appl
32	295	41.8	432	3	US-09-082-614A-59	Sequence 59, Appl
33	284.6	40.4	324	4	US-08-750-088A-36	Sequence 36, Appl
34	284.6	40.4	324	4	US-09-722-319-36	Sequence 36, Appl
35	263.6	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
36	263.6	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
37	262.4	37.2	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
38	257.2	36.5	319	4	US-08-750-088A-35	Sequence 35, Appl
39	257.2	36.5	319	4	US-09-722-319-35	Sequence 35, Appl
c 40	249	35.3	11935	4	US-09-634-238-401	Sequence 401, App
c 41	242.8	34.4	1830121	4	US-09-557-884-1	Sequence 1, Appl
c 42	242.8	34.4	1830121	4	US-09-643-390A-1	Sequence 1, Appl
c 43	240	34.0	4143	4	US-09-328-352-4006	Sequence 4006, Ap
c 44	240	34.0	14672	4	US-08-961-527-111	Sequence 111, App
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

#### ALIGNMENTS

RESULT 1  
US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC Compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422



```

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match 78.7%; Score 555; DB 2; Length 3447;
Best Local Similarity 86.7%; Pred.No.le-98;
Matches 606; Conservative 3; Mismatches 90; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCCGTCTGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACCGCAGACGCTGATCAATATCCGTCCGTGTGTGCGG 1183

Qy 61 CGATCAAGGAGTCTTTCGGCACCGACGAGCTGTCCCAAGTTCATGGAACAGAACCCGC 120
Db 1184 CTATCAAGGAATCTTCGGCACCGACGAGCTGTCCCAAGTTCATGGAACAGAACCCGC 1243

Qy 121 TGTCTGGGCTCACCCACAAGGCGGCTGTGGCGCTGGGCGGCTGTCTGTCCCGG 180
Db 1244 TGTCTGGGCTGTACCCACAAGGCGGCTGTGGCGCTGGGCGGCTGTCTGTCCCGG 1303

Qy 181 AGCGGGCGGGCTGGAGGTCGCGGACGTGCACCGCTCCCACTACGGCGGATGTGCCGA 240
Db 1304 AGGTCGCGGGCTAGAGTCTCGTGACGTGCACCCCTTCGCACCTAGCGCGGATGTGCCGA 1363

Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGTGTGATCGGCTCGCTGTGGTGTACGCGGG 300
Db 1364 TCGAGACTTCGGAGGGGCCGGAACATAGTCTGATCGGTTCAATGTCTGTGTACGCGGG 1423

Qy 301 TCACCCGCTTCGGGTTTCATCGAGAGCCGTCATCGCAGAGGTGTGTGACGCGGTGTACCG 360
Db 1424 TCACCCGCTTCGGGTTTCATCGAAGCAGCGTACGCGAAGTGGTTGACGCGGTGTGTGTCAGC 1483

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/ ZIP: 55402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA: US/08/250,030
/ APPLICATION NUMBER: US/08/250,030
/ FILING DATE: 26-MAY-1994
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Muetting, Ann M.
/ REGISTRATION NUMBER: 33,977
/ REFERENCE/DOCKET NUMBER: 150.105US1
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 612-339-0331
/ TELEFAX: 612-339-3061
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 970 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ US-08-250-030-1

Query Match          76.8%; Score 541.4; DB 1; Length 970;
Best Local Similarity 90.8%; Pred. No. 4e-96;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGCGACACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
DB 341 CCCAGGAGCTGGAGGCGATCACACGCGACACCCCTGATCAACATCCGTCGTGGCGG 400

QY 61 CGATCAAGAGGATCTTTCGGCACCGACCGAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
DB 401 CGATCAAGAGGATCTTTCGGCACCGACCGAGCTGTCCAGTTTCATGACACAGAACACCCGC 460

QY 121 TGTCCGGGCTCACCACAAAGCGCCCTGTTCGGCGCTGGGCGCCGGTGGTCTGTCCCGGG 180
DB 461 TGTCCGGGCTCACCACAAAGCGCCCTGTTCGGCGCTGGGCGCCGGTGGTCTGTCCACGTG 520

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTGCACCGTCCACATACGCGCGGATGCCCCGA 240
DB 521 AGCGTGC CGGCTGGAGAGCGCGACGTGCACCGTGCACATCGCGCGGATGCCCCGA 580

QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGTGCTCGGTTCATGAGACCGAGTGTGACCGGCGG 300
DB 581 TCGAAACCCCTGAGGGGCCAACAATCGCTCTGATCGGCTCGCTGTCGTGTACGGCGGG 640

QY 301 TCAACCCGCTTCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTGTCACCG 360
DB 641 TCAACCCGCTTCGGGTTTCATCGAAACCGCGTACCGCAAGGTGTGACCGCGTGTGTTAGCG 700

QY 361 ACGAGATCCACTACTGACCGCGCGAGGAGGACCGCAGCTGCTGTCGCGAGGCGGCAACT 420
DB 701 ACGAGATCGTGTACTGACCGCGCGAGGAGGACCGCAGCTGCTGTCGCGAGGCGGCAATT 760

QY 421 CGCCGATCGACGCGCAAGGCGCGGTTTCGCGAGGCGCGGCTGCTGTCGCGCGCAAGGCGG 480
DB 761 CGCCGATCGATCGGACCGGTGCTTTCGTGTCGAGCGCGGTGCTGTCGCGCGCAGGCGG 820

QY 481 GCGAGGTGAGTACGTGCGCTTCGTCCGAGGTGGACTACATGACGACGACGACGACGACGACGAC 540
DB 821 GCGAGGTGAGTACGTGCGCTTCGTCCGAGGTGGACTACATGACGACGACGACGACGACGACGAC 880

QY 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACGACGACGACGACGACGAC 600
DB 881 TGGTTCGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACGACGACGACGACGACGAC 940

QY 601 TGATGGGCGCAACATGCAKCGCCAGGCGG 630
DB 941 TCATGGGCGCAACATGCAKCGCCAGGCGG 970
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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/IUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; PCT-US95-06790-1
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Query Match          76.8%; Score 541.4; DB 5; Length 970;
Best Local Similarity 90.8%; Pred. No. 4e-96;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGCGACACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
DB 341 CCCAGGAGCTGGAGGCGATCACACGCGACAGCTTGATCAACATCCGTCGTGGTCGGCG 400

QY 61 CGATCAAGAGGATCTTTCGGCACCGACCGAGCTGTCCAGTTTCATGAGACAGAACACCCGC 120
DB 401 CGATCAAGAGGATCTTTCGGCACCGACCGAGCTGTCCAGTTTCATGAGACAGAACACCCGC 460

QY 121 TGTCCGGGCTCACCACAAAGCGCCCTGTTCGGCGCTGGGCGCCGGTGGTCTGTCCCGGG 180
DB 461 TGTCCGGGCTCACCACAAAGCGCCCTGTTCGGCGCTGGGCGCCGGTGGTCTGTCCACGTG 520

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCGTCCACATACGCGCGGATGCCCCGA 240
DB 521 AGCGTGC CGGCTGGAGAGCGCGACGTGCACCGTCCACATACGCGCGGATGCCCCGA 580

QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGTGCTCGGTTCATGAGTGTGTCACGCGCGG 300
DB 581 TCGAAACCCCTGAGGGGCCAACAATCGCTCTGATCGGCTCGCTGTCGTGTACGGCGGG 640

QY 301 TCAACCCGCTTCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTGTCACCG 360
DB 641 TCAACCCGCTTCGGGTTTCATCGAAACCGCGTACCGCAAGGTGTGACCGCGTGTGTTAGCG 700

QY 361 ACGAGATCCACTACTGACCGCGCGAGGAGGACCGCAGCTGCTGTCGCGAGGCGGCAACT 420
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Db 701 ACAGATCGTGTACTACCGCGGACGAGGAGGACCGCCACGTGGTGGCAGACGCAATT 760  
QY 421 CGCCGATCGACGCGCAAGGCGCGTTCGCGAGGCGCGGTGCTGCTCCGCGCAAGCGG 480  
Db 761 CGCCGATCGATCGGAGCGGTGCTGCTCGAGCGCGCGTGTGGTCCGCGCAAGCGG 820  
QY 481 GCAGGTGCGAGTACGTGCGCTCTCGAGGTGAGTACATGAGTGTCTGCGCGCGCA 540  
Db 821 GCAGGTGAGTACGTGCGCTCTCGAGGTGAGTACATGAGTGTCTGCGCGCGCA 880  
QY 541 TGTGTGCGTGGCGACCGGATGATCCGTTCTCGAGACGACGACGCAACCGTGCC 600  
Db 881 TGTGTGCGTGGCGACCGGATGATCCGTTCTCGAGACGACGACGCAACCGTGCC 940  
QY 601 TGATGGCGCAACATGCAKCGCGCGG 630  
Db 941 TCATGGGCAACATGCGCGCGGCGG 970

## RESULT 8

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 90.5%; Pred. No. 5.2e-94;  
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;  
QY 36 ATCAACATCGTCCGTCGTGGCGGATCAAGAGTTCTTGGACACGAGCGTGTCC 95  
Db 1 ATCAACATCGGCGCGGTGCTGCGCGGATCAAGAGTTCTTGGACACGAGCGTGTGC 60  
QY 96 CAGTTTCATGACACAGAAACCGCTGCGGGCTCACCCACAGCGCGCTGTGGCG 155  
Db 61 CAATTCATGACACAGAAACCGCTGCTGGGGTTGACCCACAGCGCGACTGTGGCG 120

QY 156 CTGGGCGCGGTGCTGTCTCCGGGAGCGGGCGGGCTGGAGTCCGCGACGTGCACCG 215  
Db 121 CTGGGCGCGCGGTGCTGTCTCACGTGAGCGTGGCGGTGGAGTCCGCGACGTGCACCG 180  
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCATACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCGCAACATCGGTCTGATC 240  
QY 276 GGTCCTGTCTGCTGTACGCGCGGTCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGC 335  
Db 241 GGTCCTGTCTGCTGTACGCGCGGTCAACCCGTTTCGGGTTCATCGAAACGCGGTACCGC 300  
QY 336 AAGTGTGTGAGCGCGGTGTCCCGAGAGATCCACTACTGACCGCGCGAGGAGGAC 395  
Db 301 AAGTGTGTGAGCGCGGTGTTCGCGAGAGATCGTGTACTGACCGCGCGAGGAGGAC 360  
QY 396 CGCCACGTGTGGCGCGAGGCAACTCGCGATCGAGCGCAAGGCGCGGTTCGCGCGAGGCC 455  
Db 361 CGCCACGTGTGGCGCGAGGCAACTCGCGATCGAGCGCGGTTCGTCGAGCGG 420  
QY 456 CGGTGTCTGTCCGCGCGAGGCGCGGCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC 515  
Db 421 CGGTGTCTGTCCGCGCGAGGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480  
QY 516 TACATGACNTKTCSCCGCGCARATGTTGTTGCGTGGCGCACCGCGATGATCCGTTCTC 575  
Db 481 TACATGAGCGTCTCGCGCGCGAGATGGTGTGGTGGCGCACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCAGCAGCGCGCAACCGTGCCTGTGATGGCGCGCAACATGCAKCGCGCGGTTCG 635  
Db 541 GAGCAGCAGCGCGCAACCGTGCCTGTGATGGCGCGCAACATGCAKCGCGCGGTTCG 600  
QY 636 CTGGTCCGCGAGGCGCGG 655  
Db 601 CTGGTCCGCGAGGCGCGG 620

## RESULT 9

US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 5.2e-94;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGCTCCGTCGTCGGCGGATCAAGAGTCTCTCGGCACGACGCTGCC 95
DB 620 ATCAACATCGCTCCGTCGTCGGCGGATCAAGAGTCTCTCGGCACGACGCTGCC 561

QY 96 CAGTTCATGACGACGACAAACCCGCTCTCGGGGCTCAACCAAGCGCGCTCTCGCG 155
DB 560 CAATTCATGACGACGACAAACCCGCTCTCGGGGTTGACCAAGCGCGCTCTCGCG 501

QY 156 CTGGGCGCGGTCGTCTGTCTCCGGGAGCGGGCTGAGGTCGCGAGTCGCGACCCG 215
DB 500 CTGGGCGCGGTCGTCTGTCTCCGGGAGCGGGCTGAGGTCGCGAGTCGCGACCCG 441

QY 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCGCGAGGTCCTCAACATCGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCGCAACATCGTCTGATC 381

QY 276 GGCTCGCTGTCGTCGTCGCGGCTCAACCCGTTTCGCGTTCATCGAGACCGCTACCGC 335
DB 380 GGCTCGCTGTCGTCGTCGCGGCTCAACCCGTTTCGCGTTCATCGAAACCGCTACCGC 321

QY 336 AAGTGTGTGACGCGGTCGTACCGAGATCACTACCTGACCGCGCGAGAGGAC 395
DB 320 AAGTGTGTGACGCGGTCGTACCGAGATCGTACCTGACCGCGAGAGGAC 261

QY 396 CGCCACGTGTGGCGAGGCGCACTCGCCGATCGACGCGAGGCGGTTTCGCGAGGCC 455
DB 260 CGCCACGTGTGGCGAGGCGCAATTCGCGGATCGATCGCGAGTTCGTCGAGCGG 201

QY 456 CGGTCGTGTGTCGCGCGGAGGTCGAGTACGTGCGCTCGTCGAGGTGGAC 515
DB 200 CGGTCGTGTGTCGCGCGGAGGTCGAGTACGTGCGCTCGTCGAGGTGGAC 141

QY 516 TACATGACNTKTCSCCGCGCABATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 575
DB 140 TACATGACNTKTCSCCGCGCABATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 81

QY 576 GAGCAGCAGCGCGCAACCGTCCCTGATGGCGCCACATGCAKCGCGAGCGGTTCCG 635
DB 80 GAGCAGCAGCGCGCAACCGTCCCTCATGGGGGCAACATGCAKCGCGAGCGGTTCCG 21

QY 636 CTGTTGCGCAGCGANGCGCC 655
DB 20 CTGTTGCGCAGCGANGCGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135; Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

Db 601 CTGGTCGCTAGCAGGCCCC 620

RESULT 11  
US-08-520-946-138/c  
; Sequence 138, Application US/08520946  
; Patent No. 6372424  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; TITLE OF INVENTION: PATHOGENS  
; NUMBER OF SEQUENCES: 160  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/520,946  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 90.5%; Pred. No. 5.2e-94;  
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTGGCGGCGATCAAGGAGTTCTTCGGACACGAGCGAGTGTCC 95  
Db 620 ATCAACATCCGCGCGTGTCTCGCGGATCAAGGAGTTCTTCGGACACGAGCGTGC 561

QY 96 CAGTTTCATGGACAGAACACCGCTGTCTGGGGCTCACCAAGCGCGCTGTCTGGCG 155  
Db 560 CAATTTCATGGACAGAACACCGCTGTCTGGGGTTGACCAAGCGCGAGTGTCTGGCG 501

QY 156 CTGGGCGCGGTGTCTGTCTCGGAGCGGCGGCTGGAGTTCGGACGTCGACCG 215  
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QY 216 TCCCACTACGCGCGGATGTCTCGCGATCGAGACCCGAGGGTCCCAACATCGTCTGATC 275  
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QY 276 GGTCTGCTGTCTGATCGCGGGGTCAACCGTTTGGGTTTATCGAGACGCGGTACCGC 335  
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QY 336 AAGGTGTCTGACGCGGTGTCTACCGACGAGATCCACTACTGACCGCGCGAGGAGGAC 395  
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QY 396 CGCCACGTGTGGCGGAGCCAACTCCCGATCGACGGCAAGGGCGGTTTCGGCGAGGCC 455  
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QY 456 CGGGTGTCTGTCTCGCGGAGCGGCGGAGTGTAGTGTGCTGCTGCTGCGAGGTGAC 515  
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QY 516 TACATGGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCGTTCTTC 575  
Db 140 TACATGGACGTCTCGCCCCCGCAGATGGTGTCTGGTGGCCACCGCGATGATCCCTTCCTG 81

QY 576 GAGCAGCAGCAGCCAAACCGTGTCCCTGTATGGGGCGCAACATGCAKCGCCAGCGGTTCCG 635  
Db 80 GAGCAGCAGCAGCCAAACCGTGTCCCTCATGGGGCGCAACATGCAKCGCCAGCGGTTCCG 21

QY 636 CTGGTGTGGCGGAGCGGCC 655  
Db 20 CTGGTGTGGCGGAGCGGCC 1

RESULT 12  
US-09-655-378A-135  
; Sequence 135, Application US/09655378A  
; Patent No. 6673616  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/655,378A  
; FILING DATE: 05-Sep-2000  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:  
; US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 90.5%; Pred. No. 5.2e-94;  
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTGGCGGCGATCAAGGAGTTCTTCGGACACGAGCGAGTGTCC 95  
Db 1 ATCAACATCCGCGCGTGTCTCGCGGATCAAGGAGTTCTTCGGACACGAGCGTGC 60

QY 96 CAGTTCATGACACAGAACAAACCGCTCTCGGGGCTACCCACAGAGCGCGCGCTGTGGCG 155  
Db 61 CAATTATGACACAGAACAAACCGCTCTCGGGGTTGACCCACAGAGCGCGCGCTGTGGCG 120  
QY 156 CTGGGCGCGGTGTCTGTCCCGGAGCGGCGGGGTGAGGTCGCGAGCTGCACCG 215  
Db 121 CTGGGCGCGGTGTCTGTACGTAGCGTGTCCGGGTGAGGTCGCGAGCTGCACCG 180  
QY 216 TCCCACTACGCGCGATGTGCCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGTGTCTGTACGCGCGGTCAACCCCTTCCGGTTCATCGAGACCGGTACCG 335  
Db 241 GGCTCGTGTCTGTACGCGCGGTCAACCCCTTCCGGTTCATCGAAACCGGTACCG 300  
QY 336 AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395  
Db 301 AAGTGTGTGACGCGGTGTTCACGACGAGATCGTGTACCTGACCGCGAGGAGGAC 360  
QY 396 CGCCACGTGTGGCGCGAGGCAACTCGCGATCGACCGGCAAGGCGCGGTTCGCGAGGCC 455  
Db 361 CGCCACGTGTGGCGAGGCAATTTCGCGATCGATCGGACGCTGCTTCGTGAGCGG 420  
QY 456 CGGTGTGTCTCGCGCGAGGCGAGGTTCAGTACGTGCGCTTCGTGAGGTCGAC 515  
Db 421 CGGTGTGTCTCGCGCGAGGCGAGGTTCAGTACGTGCGCTTCGTGAGGTCGAC 480  
QY 516 TACATGACGACGACGCGCGCGATGTGTGCGTGGCGACCGGATGATCCGCTTCCTC 575  
Db 481 TACATGACGACGCGCGCGCGATGTGTGCGTGGCGACCGGATGATTCCTTCCTG 540  
QY 576 GAGCAGCAGCAGCAGCAGCGCTGATGGCGCCCAACATGACGCGCGAGGCGGTTCG 635  
Db 541 GAGCAGCAGCAGCAGCAGCGCTGATGGCGCCCAACATGAGGCGCGAGGCGGTTCG 600  
QY 636 CTGGTGGCGAGCGCGCGCC 655  
Db 601 CTGGTGGCGAGCGCGCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 90.5%; Pred. No. 5.2e-94;  
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCGTCGGCGGATCAAGAGATTCTTGGCACACAGCAGCTGTCC 95  
Db 620 ATCAACATCCGTCGTCGGCGGATCAAGAGATTCTTGGCACACAGCAGCTGTCC 561  
QY 96 CAGTTCATGACACAGAACAAACCGCTGTCCGGGCTCACCCACAGAGCGCGCTGTCCGGCG 155  
Db 560 CAATTATGACACAGAACAAACCGCTGTCCGGGTTGACCCACAGAGCGCGCTGTCCGGCG 501  
QY 156 CTGGGCGCGGTGTCTGTCTCCGGGAGCGGCGCGGTTCGAGGTCGCGAGCTGCACCG 215  
Db 500 CTGGGCGCGGTGTCTGTCTCCGGGAGCGGCGCGGTTCGAGGTCGCGAGCTGCACCG 441  
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCGCGGAGGTCCCAACATCGGTCTGATC 275  
Db 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGCTCGTGTCTGTGTACGCGCGGCTCAACCCGTTCCGGGTTTCATCGAGACGCGGTACCGCG 335  
Db 380 GGCTCGTGTCTGTGTACGCGCGGCTCAACCCGTTCCGGGTTTCATCGAAACGCGGTACCGCG 321  
QY 336 AAGTGTGTGACGCGGTGTTCACGAGATCACAATCTGACCGCGCGAGGAGGAC 395  
Db 320 AAGTGTGTGACGCGGTGTTCACGAGATCACAATCTGACCGCGCGAGGAGGAC 261  
QY 396 CGCCACGTGTGGCGAGGCGCAACTCGCGATCGAGCGAGGCGCGGTTCGCGAGCGCC 455  
Db 260 CGCCACGTGTGGCGAGGCGCAATTCGCCATCGATCGGACGCTTCGTTCGAGCGCG 201  
QY 456 CGGTGTCTGTTCGCGCGCAAGGCGGCGAGGTTCAGTACGTCGCGCTTCGTTCGAGGTGAC 515  
Db 200 CGGTGTCTGTTCGCGCGCAAGGCGGCGAGGTTCAGTACGTCGCGCTTCGTTCGAGGTGAC 141  
QY 516 TACATGACGACGACGCGCGCGATGTCGCGTGGCGACCGGATGATCCGCTTCCTC 575  
Db 140 TACATGACGACGACGCGCGCGATGTCGCGTGGCGACCGGATGATTCCTTCCTG 81  
QY 576 GAGCAGCAGCAGCAGCAGCGTCCCTGATGGCGCCCAACATGACGCGAGGCGGTTCG 635  
Db 80 GAGCAGCAGCAGCAGCAGCGTCCCTGATGGCGCCCAACATGAGGCGAGGCGGTTCG 21  
QY 636 CTGGTGGCGAGCGCGCC 655  
Db 20 CTGGTGGCGAGCGCGCC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```
/ CORRESPONDENCE ADDRESS:
/ ADDRESSER: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE: US/08/757,653
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 136:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-136

Query Match      75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.3%; Pred. No. 1.1e-93;
Matches 560; Conservative 3; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTCGTGGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 60
QY 96 CAGTTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 155
DB 61 CAATTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 180
QY 216 TCCCACTACGGCCGGATGTGCCCGATCCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
DB 181 TCGCACTACGGCCGGATGTGCCCGATCCGAGACCCCGTGGGGCCCAACATCGTCTGATC 240
QY 276 GGCTCGTGTGGTGTACCGCGGGTCAACCCCGTTCGGGTTCATCGAGACCGGTACCCG 335

CORRESPONDENCE ADDRESS:
/ ADDRESSER: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE: US/08/757,653
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 137:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-137

Query Match      75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.3%; Pred. No. 1.1e-93;
Matches 560; Conservative 3; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTCGTGGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 60
QY 96 CAGTTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 155
DB 61 CAATTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 180
QY 216 TCCCACTACGGCCGGATGTGCCCGATCCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
DB 181 TCGCACTACGGCCGGATGTGCCCGATCCGAGACCCCGTGGGGCCCAACATCGTCTGATC 240
QY 276 GGCTCGTGTGGTGTACCGCGGGTCAACCCCGTTCGGGTTCATCGAGACCGGTACCCG 335

CORRESPONDENCE ADDRESS:
/ ADDRESSER: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE: US/08/757,653
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 138:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-138

Query Match      75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.3%; Pred. No. 1.1e-93;
Matches 560; Conservative 3; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTCGTGGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCAACCAAGCGAGTGTCC 60
QY 96 CAGTTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 155
DB 61 CAATTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCGGGAGCGGGCTGGAGTTCGGACCTGACCCG 180
QY 216 TCCCACTACGGCCGGATGTGCCCGATCCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
DB 181 TCGCACTACGGCCGGATGTGCCCGATCCGAGACCCCGTGGGGCCCAACATCGTCTGATC 240
QY 276 GGCTCGTGTGGTGTACCGCGGGTCAACCCCGTTCGGGTTCATCGAGACCGGTACCCG 335
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Db	241	GGCTCGCTGTGCGGTGTCACGCGGGGTCAACCGGTTCTGGGTTCAATCAAAACGCCGTACCGC	300
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Db	301	AAGTGTGTGACGGCGTGGTGTAGCAGCAGATCTGTACTTACCGCCGACGAGGAGGAC	360
Qy	396	CGCCACGTGTGTGGCGCAGGCCAACTCGCCGATTCGACCGCAAGGGCGGTTTCGCCGAGGCC	455
Db	361	CGCCACGTGTGTGGCAGACGGCCAAATTCGCCGATCGGACGGTCTGTCGAGCGC	420
Qy	456	CGGTCGTGTTCCGCGCGCAAGCGGGCGAGTCTGAGTAGTGTCCTCTGCTCCAGAGTGAC	515
Db	421	CGCGTGTGTTGTCGCGCGCAAGCGGGCGAGTGTGAGTAGTCTGCTCCGTTGAGGTGGAC	480
Qy	516	TACATGGACNTKTCSGCGCCARATGTGTTCGTTGGCCACGCGCATGATCCGTTCCCTC	575
Db	481	TACATGGACGTCTCGCCCGCGCAGATGTGTTCGTTGGCCACGCGCATGATCCCTTCCTTG	540
Qy	576	GAGCACGACGACGGCCAAACCGTGCCCTGATGGCGGCCAACATCGACGCGCAGCGGTTCGG	635
Db	541	GAGCACGACGACGCCAACCGTGTCCTCATGSGGGCAACATCGAGGGCCAGCGGTTCGGC	600
Qy	636	CTGTCGCGACGANGGCC	655
Db	601	CTGTCGCGTAGCGAGGCCCC	620

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Job time : 78.4446 secs



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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds  
(without alignments)  
8488.468 Million cell updates/sec

Title: US-09-285-306-3

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Sequence: 1 ccaggacgtggagcgatc.....ggcgatcgacgcgcgcgt 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq.\*
- 4: /cgn2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq.\*
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- 7: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq.\*
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- 9: /cgn2\_6/ptodata/1/pubpna/US09A\_PUBCOMB.seq.\*
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- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq.\*
- 12: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq.\*
- 13: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq2.\*
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- 15: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq.\*
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- 19: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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3	695	98.6	705	9	US-09-285-306-5
4	695	98.6	705	9	US-09-285-306-6
5	695	98.6	705	9	US-09-285-306-7
6	695	98.6	705	9	US-09-285-306-8
7	695	98.6	705	9	US-09-285-306-9
8	695	98.6	705	9	US-09-285-306-12
9	695	98.6	705	9	US-09-285-306-13
10	695	98.6	705	9	US-09-285-306-14
11	695	98.6	705	9	US-09-285-306-16
12	695	98.6	705	9	US-09-285-306-17
13	695	98.6	705	9	US-09-285-306-24
14	693	98.3	705	9	US-09-285-306-11

15	683	96.9	705	9	US-09-285-306-10	Sequence 10, Appl
16	681	96.6	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	677	96.0	687	9	US-09-285-306-18	Sequence 18, Appl
18	677	96.0	687	9	US-09-285-306-19	Sequence 19, Appl
19	677	96.0	687	9	US-09-285-306-20	Sequence 20, Appl
20	677	96.0	687	9	US-09-285-306-21	Sequence 21, Appl
21	677	96.0	687	9	US-09-285-306-22	Sequence 22, Appl
22	677	96.0	687	9	US-09-285-306-23	Sequence 23, Appl
23	677	96.0	687	9	US-09-285-306-25	Sequence 25, Appl
24	677	96.0	687	9	US-09-285-306-27	Sequence 27, Appl
25	656.6	93.1	705	9	US-09-285-306-143	Sequence 143, Appl
26	655	92.9	705	9	US-09-285-306-144	Sequence 144, Appl
27	651.8	92.5	705	9	US-09-285-306-87	Sequence 87, Appl
28	651.8	92.5	705	9	US-09-285-306-88	Sequence 88, Appl
29	651.8	92.5	705	9	US-09-285-306-90	Sequence 90, Appl
30	651.8	92.5	705	9	US-09-285-306-92	Sequence 92, Appl
31	651.8	92.5	705	9	US-09-285-306-96	Sequence 96, Appl
32	651.8	92.5	705	9	US-09-285-306-181	Sequence 181, Appl
33	650.6	92.3	705	9	US-09-285-306-84	Sequence 84, Appl
34	650.6	92.3	705	9	US-09-285-306-86	Sequence 86, Appl
35	650.6	92.3	705	9	US-09-285-306-93	Sequence 93, Appl
36	650.6	92.3	705	9	US-09-285-306-94	Sequence 94, Appl
37	650.6	92.3	705	9	US-09-285-306-95	Sequence 95, Appl
38	649	92.1	705	9	US-09-285-306-85	Sequence 85, Appl
39	649	92.1	705	9	US-09-285-306-89	Sequence 89, Appl
40	649	92.1	705	9	US-09-285-306-91	Sequence 91, Appl
41	638.6	90.6	687	9	US-09-285-306-146	Sequence 146, Appl
42	638.6	90.6	687	9	US-09-285-306-148	Sequence 148, Appl
43	634.6	90.0	705	9	US-09-285-306-75	Sequence 75, Appl
44	633.8	89.9	687	9	US-09-285-306-100	Sequence 100, Appl
45	632.2	89.7	687	9	US-09-285-306-99	Sequence 99, Appl

## ALIGNMENTS

RESULT 1  
US-09-285-306-3  
; Sequence 3, Application US/09285306A  
; Publication No. US20020187467A1  
GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Dreknow, Jorg  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 3  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (525)...(525)  
; OTHER INFORMATION: n = g,a,c or t  
; FEATURE:  
; NAME/KEY: modified base  
; LOCATION: (650)...(650)  
; OTHER INFORMATION: n = g,a,c or t  
US-09-285-306-3

Query Match 99.5%; Score 701.4; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-151;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 CCCAGGCGTGGAGCGGATCACACCGAGACCCCTGATCAACATCGTCCCTCGTGGCGG 60  
Db 1 CCCAGGCGTGGAGCGGATCACACCGAGACCCCTGATCAACATCGTCCCTCGTGGCGG 60

```
QY 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTCCAGTTTCATGGACCAAGAAACAACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTCCAGTTTCATGGACCAAGAAACAACCCGC 120
QY 121 TGTGCGGGGCTCACCCACAAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGCGGGGCTCACCCACAAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 131 AGCGGCGCGGGTGTGAGGTTCGGGAGTGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 240
Db 131 AGCGGCGCGGGTGTGAGGTTCGGGAGTGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTTCGCAACATCGTCTGATTCGGTCTCGCTGTGAGCGGGG 300
Db 241 TCAGACCCCGGAGGTTCGCAACATCGTCTGATTCGGTCTCGCTGTGAGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
QY 361 ACAGATCCACTACCTGACCGCGACGAGAGAGACCGCCACCGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGACGAGAGAGACCGCCACCGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGCAAGGGCGGTTCCGCGAGGCGCGGTGTGCGACGGCGG 480
Db 421 CGCGGATCGACGCGCAAGGGCGGTTCCGCGAGGCGCGGTGTGCGACGGCGG 480
QY 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGACNTKTCSCCGCGCCARA 540
Db 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGACNTKTCSCCGCGCCARA 540
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCGAGACACGACGACGCAACCGTGCCC 600
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCGAGACACGACGACGCAACCGTGCCC 600
QY 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
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## RESULT 2

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US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; FILE REFERENCE: 018547-01857005
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4
```

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6.1e-150;  
Matches 695; Conservative 4; Mismatches 15; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGCGATCACACCGAGACCTGTATCAACATCCCGTCCCGTGGCGG 60

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Db 1 CCCAGGAGTGGAGGCGATCACACCGAGACCTGTATCAACATCCCGTCCCGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTCCAGTTTCATGGACCAAGAAACAACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTCCAGTTTCATGGACCAAGAAACAACCCGC 120
QY 121 TGTGCGGGGCTCACCCACAAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGCGGGGCTCACCCACAAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGTGTGAGGTTCGGGAGTGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 240
Db 181 AGCGGCGCGGGTGTGAGGTTCGGGAGTGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTTCGCAACATCGTCTGATTCGGTCTCGCTGTGAGCGGGG 300
Db 241 TCAGACCCCGGAGGTTCGCAACATCGTCTGATTCGGTCTCGCTGTGAGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
QY 361 ACAGATCCACTACCTGACCGCGACGAGAGAGACCGCCACCGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGACGAGAGAGACCGCCACCGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGCAAGGGCGGTTCCGCGAGGCGCGGTGTGCGACGGCGG 480
Db 421 CGCGGATCGACGCGCAAGGGCGGTTCCGCGAGGCGCGGTGTGCGACGGCGG 480
QY 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGACNTKTCSCCGCGCCARA 540
Db 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGACNTKTCSCCGCGCCARA 540
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCGAGACACGACGACGCAACCGTGCCC 600
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCGAGACACGACGACGCAACCGTGCCC 600
QY 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
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## RESULT 3

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US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-01857005
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6.1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;



```

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACGACAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACGACAGACCTGATCAACATCCGTCCTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCGC 120
QY 121 TGTGCGGGGTACCCACAGAGCGCGCTGTGCGCGCTGGGCGCGGTGTGTCTCCCGG 180
DB 121 TGTGCGGGGTACCCACAGAGCGCGCTGTGCGCGCTGGGCGCGGTGTGTCTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGGAGTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGGGAGTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGTGTACGCGCGG 300
DB 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGTGTACGCGCGG 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGG 360
DB 301 TCAACCCGTTCCGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACAGCGAAGGCGCGTTCCGCGAGCGCCGGTGTGTGTCGCGCAAGCGG 480
DB 421 CGCCGATCGACAGCGAAGGCGCGTTCCGCGAGCGCCGGTGTGTGTCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGCGCARA 540
DB 481 GCGAGTCCAGTACGTGCGCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGCGCARA 540
QY 541 TGTGTGCGTGGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
DB 541 TGTGTGCGTGGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCAGCGGTCCTCGTGTGGCGAGCGANGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGCAKCGCAGCGGTCCTCGTGTGGCGAGCGANGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

```

RESULT 6

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US-09-285-306-3
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA

```

RESULT 7

```

US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9

```

ORGANISM: Mycobacterium avium

```

US-09-285-306-8
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACGACAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACGACAGACCTGATCAACATCCGTCCTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCGC 120
QY 121 TGTGCGGGGTACCCACAGAGCGCGCTGTGCGCGCTGGGCGCGGTGTGTCTCCCGG 180
DB 121 TGTGCGGGGTACCCACAGAGCGCGCTGTGCGCGCTGGGCGCGGTGTGTCTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGGAGTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGGGAGTGCACCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGTGTACGCGCGG 300
DB 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGTGTACGCGCGG 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGG 360
DB 301 TCAACCCGTTCCGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGCGG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACAGCGAAGGCGCGTTCCGCGAGCGCCGGTGTGTGTCGCGCAAGCGG 480
DB 421 CGCCGATCGACAGCGAAGGCGCGTTCCGCGAGCGCCGGTGTGTGTCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGCGCARA 540
DB 481 GCGAGTCCAGTACGTGCGCTTCGTCGAGGTGGACTACATGGACNTKTCSCCGCGCARA 540
QY 541 TGTGTGCGTGGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
DB 541 TGTGTGCGTGGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCAGCGGTCCTCGTGTGGCGAGCGANGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGCAKCGCAGCGGTCCTCGTGTGGCGAGCGANGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCCCGGGTGTGTCTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCCCGGGTGTGTCTCCCGGG 180
QY 181 AGCGGGCGGGCTGAGGTTCGAGTCCGCGAGCGTGCACCGTCCCTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGGCGGGCTGAGGTTCGAGTCCGCGAGCGTGCACCGTCCCTACGCGCGGATGTCGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTACCGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTATCGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTGCACGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTGCACGCGTGTCAACG 360
QY 361 ACAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTCGTCGCGAGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTCGTCGCGAGGCGCAACT 420
QY 421 CGCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGGTGTCTGTCGCGCGCAAGGCGG 480
Db 421 CGCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGGTGTCTGTCGCGCGCAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACACNTKTCSCGCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACACNTKTCSCGCGGCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGANGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGANGCGCGCTGG 660
QY 661 TGGCACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGCACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 8
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1998-04-02
; EARLIER APPLICATION NUMBER: US 60/080.616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCCCGGGTGTGTCTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCCCGGGTGTGTCTCCCGGG 180
QY 181 AGCGGGCGGGCTGAGGTTCGAGTCCGCGAGCGTGCACCGTCCCTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGGCGGGCTGAGGTTCGAGTCCGCGAGCGTGCACCGTCCCTACGCGCGGATGTCGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTACCGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTATCGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTGCACGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGGTGGTGCACGCGTGTCAACG 360
QY 361 ACAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTCGTCGCGAGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTCGTCGCGAGGCGCAACT 420
QY 421 CGCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGGTGTCTGTCGCGCGCAAGGCGG 480
Db 421 CGCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGGTGTCTGTCGCGCGCAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACACNTKTCSCGCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACACNTKTCSCGCGGCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGANGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGANGCGCGCTGG 660
QY 661 TGGCACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGCACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 9
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080.616
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
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; CURRENT FILING DATE: 1998-04-03  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 13  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-13

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6.1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCAGAGCTGGAGGCGATCACACCCAGACCTGATCAACATCCCTCCGTCGTCGCGG 60  
DB 1 CCAGAGCTGGAGGCGATCACACCCAGACCTGATCAACATCCCTCCGTCGTCGCGG 60  
QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120  
DB 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120  
QY 121 TGTTCGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCGCTGTCGTCGTCGTCGCGG 180  
DB 121 TGTTCGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCGCTGTCGTCGTCGTCGCGG 180  
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCCACTACGCGCGGATGTCGCGA 240  
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCCACTACGCGCGGATGTCGCGA 240  
QY 241 TCAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGTCGTCGTCGCGG 300  
DB 241 TCAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGTCGTCGTCGCGG 300  
QY 301 TCAACCCGTTCCGTTTCATCGAGACCGCTGACCGAAGGTGTCGACGCGGTCGTCACCG 360  
DB 301 TCAACCCGTTCCGTTTCATCGAGACCGCTGACCGAAGGTGTCGACGCGGTCGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420  
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420  
QY 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480  
DB 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480  
QY 481 GCAGGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
DB 481 GCAGGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
QY 541 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600  
DB 541 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600  
QY 601 TGATGGCGCGCAACATGCAKCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
DB 601 TGATGGCGCGCAACATGCAKCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705  
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705

RESULT 10  
US-09-285-306-14  
; Sequence 14, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 14  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-14

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6.1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCAGAGCTGGAGGCGATCACACCCAGACCTGATCAACATCCCTCCGTCGTCGCGG 60  
DB 1 CCAGAGCTGGAGGCGATCACACCCAGACCTGATCAACATCCCTCCGTCGTCGCGG 60  
QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120  
DB 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120  
QY 121 TGTTCGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCGCTGTCGTCGTCGTCGCGG 180  
DB 121 TGTTCGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCGCTGTCGTCGTCGTCGCGG 180  
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCCACTACGCGCGGATGTCGCGA 240  
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCCACTACGCGCGGATGTCGCGA 240  
QY 241 TCAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGTCGTCGTCGCGG 300  
DB 241 TCAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGTCGTCGTCGCGG 300  
QY 301 TCAACCCGTTCCGTTTCATCGAGACCGCTGACCGAAGGTGTCGACGCGGTCGTCACCG 360  
DB 301 TCAACCCGTTCCGTTTCATCGAGACCGCTGACCGAAGGTGTCGACGCGGTCGTCACCG 360  
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420  
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420  
QY 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480  
DB 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480  
QY 481 GCAGGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
DB 481 GCAGGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
QY 541 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600  
DB 541 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600  
QY 601 TGATGGCGCGCAACATGCAKCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
DB 601 TGATGGCGCGCAACATGCAKCGCAGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705  
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGGACGT 705

RESULT 11  
US-09-285-306-16  
; Sequence 16, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences



; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 16  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-16

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6,1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60  
Db 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTCGGCCACCAAGCCAGCTGTCCAGTTGATGACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTCGGCCACCAAGCCAGCTGTCCAGTTGATGACAGAACACCCGC 120  
QY 121 TGTGGGCTCACCCACAAAGCCGCTGTGGCGCTGGGCCGCGGTCTGTGTCCTGGG 180  
Db 121 TGTGGGCTCACCCACAAAGCCGCTGTGGCGCTGGGCCGCGGTCTGTGTCCTGGG 180  
QY 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGAGGTCCTGACATCGCTCTGATCGGCTCGTGTGCTGTACGCGCGG 300  
Db 241 TCGAGACCCCGAGGTCCTGACATCGCTCTGATCGGCTCGTGTGCTGTACGCGCGG 300  
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGCTGACGCGGTGTGTCACG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGCTGACGCGGTGTGTCACG 360  
QY 361 ACAGATCCACTACTGACCCGCGAGAGGAGCCGACGTCGTGTGCGCAGGCCAACT 420  
Db 361 ACAGATCCACTACTGACCCGCGAGAGGAGCCGACGTCGTGTGCGCAGGCCAACT 420  
QY 421 CGCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTCTGTGTCGCGCAAGGCGG 480  
Db 421 CGCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTCTGTGTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCAGTACGTGCTGCTCGAGTGGACTACATGACNTKTCSCGCGCCARA 540  
Db 481 GCGAGTCCAGTACGTGCTGCTCGAGTGGACTACATGACNTKTCSCGCGCCARA 540  
QY 541 TGTGTGCTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCCACCGTGCC 600  
Db 541 TGTGTGCTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCCACCGTGCC 600  
QY 601 TGATGGCGCCACATCAKCGCCAGCGGTTCGCTGTGTCGCGAGCGGCGCGTGG 660  
Db 601 TGATGGCGCCACATCAKCGCCAGCGGTTCGCTGTGTCGCGAGCGGCGCGTGG 660  
QY 661 TGGSCACCGCATGGAGCTGCGCGCGGATCGACGCGGCGACGT 705  
Db 661 TGGSCACCGCATGGAGCTGCGCGCGGATCGACGCGGCGACGT 705

RESULT 12  
US-09-285-306-17  
; Sequence 17, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 17  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-17

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6,1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60  
Db 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTCGGCCACCAAGCCAGCTGTCCAGTTGATGACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTCGGCCACCAAGCCAGCTGTCCAGTTGATGACAGAACACCCGC 120  
QY 121 TGTGGGCTCACCCACAAAGCCGCTGTGGCGCTGGGCCGCGGTCTGTGTCCTGGG 180  
Db 121 TGTGGGCTCACCCACAAAGCCGCTGTGGCGCTGGGCCGCGGTCTGTGTCCTGGG 180  
QY 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGAGGTCCTGACATCGCTCTGATCGGCTCGTGTGCTGTACGCGCGG 300  
Db 241 TCGAGACCCCGAGGTCCTGACATCGCTCTGATCGGCTCGTGTGCTGTACGCGCGG 300  
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGCTGACGCGGTGTGTCACG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGCTGACGCGGTGTGTCACG 360  
QY 361 ACAGATCCACTACTGACCCGCGAGAGGAGCCGACGTCGTGTGCGCAGGCCAACT 420  
Db 361 ACAGATCCACTACTGACCCGCGAGAGGAGCCGACGTCGTGTGCGCAGGCCAACT 420  
QY 421 CGCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTCTGTGTCGCGCAAGGCGG 480  
Db 421 CGCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTCTGTGTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCAGTACGTGCTGCTCGAGTGGACTACATGACNTKTCSCGCGCCARA 540  
Db 481 GCGAGTCCAGTACGTGCTGCTCGAGTGGACTACATGACNTKTCSCGCGCCARA 540  
QY 541 TGTGTGCTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCCACCGTGCC 600  
Db 541 TGTGTGCTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCCACCGTGCC 600  
QY 601 TGATGGCGCCACATCAKCGCCAGCGGTTCGCTGTGTCGCGAGCGGCGCGTGG 660  
Db 601 TGATGGCGCCACATCAKCGCCAGCGGTTCGCTGTGTCGCGAGCGGCGCGTGG 660  
QY 661 TGGSCACCGCATGGAGCTGCGCGCGGATCGACGCGGCGACGT 705  
Db 661 TGGSCACCGCATGGAGCTGCGCGCGGATCGACGCGGCGACGT 705

RESULT 13  
US-09-285-306-24  
; Sequence 24, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:

Publication No. US20020187467A1  
GENERAL INFORMATION:  
APPLICANT: Gingeras, Thomas  
APPLICANT: Drenkow, Jorg  
TITLE OF INVENTION: Mycobacterial rpoB Sequences  
FILE REFERENCE: 018547-018570US  
CURRENT APPLICATION NUMBER: US/09/285,306A  
CURRENT FILING DATE: 1999-04-02  
EARLIER APPLICATION NUMBER: US 60/080,616  
EARLIER FILING DATE: 1998-04-03  
NUMBER OF SEQ ID NOS: 181  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 11  
LENGTH: 705  
TYPE: DNA  
ORGANISM: Mycobacterium avium  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (42)...(42)  
OTHER INFORMATION: n = g,a,c or t  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (692)...(692)  
OTHER INFORMATION: n = g,a,c or t  
US-09-285-306-11

Query Match 98.3%; Score 693; DB 9; Length 705;  
Best Local Similarity 98.3%; Pred. No. 1.7e-149;  
Matches 693; Conservative 4; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCTGTCGTCGG 60  
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCTGTCGTCGG 60  
QY 61 CGATCAAGAGATTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACACCCGC 120  
Db 61 CGATCAAGAGATTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGTGGCGCGTGGTGTCTGTCGCGG 180  
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGTGGCGCGTGGTGTCTGTCGCGG 180  
QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGGCCGATGTGCCGA 240  
Db 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGGCCGATGTGCCGA 240  
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 300  
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 300  
QY 301 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 360  
Db 301 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 360  
QY 361 ACAGAGATCCACTACTACCTGACCCCGACAGGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420  
Db 361 ACAGAGATCCACTACTACCTGACCCCGACAGGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420  
QY 421 CGCGGATCGACGCGCAAGGGCGGGTTCGCCGAGGCGCGGGTCTGTCGCGCGCGAGGGCGG 480  
Db 421 CGCGGATCGACGCGCAAGGGCGGGTTCGCCGAGGCGCGGGTCTGTCGCGCGCGAGGGCGG 480  
QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGAANTKTCSCCGCGCCARA 540  
Db 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGAANTKTCSCCGCGCCARA 540  
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTGCCTCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTGCCTCC 600  
QY 601 TGATGGGCGCCAAATGCAKCGCGGGTTCGCTGTCGCGAGCGGCGGCGGCGGCGCTGG 660

APPLICANT: Gingeras, Thomas  
APPLICANT: Drenkow, Jorg  
TITLE OF INVENTION: Mycobacterial rpoB Sequences  
FILE REFERENCE: 018547-018570US  
CURRENT APPLICATION NUMBER: US/09/285,306A  
CURRENT FILING DATE: 1999-04-02  
EARLIER APPLICATION NUMBER: US 60/080,616  
EARLIER FILING DATE: 1998-04-03  
NUMBER OF SEQ ID NOS: 181  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 24  
LENGTH: 705  
TYPE: DNA  
ORGANISM: Mycobacterium avium  
US-09-285-306-24

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.6%; Pred. No. 6.1e-150;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCTGTCGTCGG 60  
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCTGTCGTCGG 60  
QY 61 CGATCAAGAGATTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACACCCGC 120  
Db 61 CGATCAAGAGATTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGTGGCGCGTGGTGTCTGTCGCGG 180  
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGTGGCGCGTGGTGTCTGTCGCGG 180  
QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGGCCGATGTGCCGA 240  
Db 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGGCCGATGTGCCGA 240  
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 300  
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 300  
QY 301 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 360  
Db 301 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTCGCGCGGG 360  
QY 361 ACAGAGATCCACTACTACCTGACCCCGACAGGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420  
Db 361 ACAGAGATCCACTACTACCTGACCCCGACAGGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420  
QY 421 CGCGGATCGACGCGCAAGGGCGGGTTCGCCGAGGCGCGGGTCTGTCGCGCGCGAGGGCGG 480  
Db 421 CGCGGATCGACGCGCAAGGGCGGGTTCGCCGAGGCGCGGGTCTGTCGCGCGCGAGGGCGG 480  
QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGAANTKTCSCCGCGCCARA 540  
Db 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGAANTKTCSCCGCGCCARA 540  
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTGCCTCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTGCCTCC 600  
QY 601 TGATGGGCGCCAAATGCAKCGCGGGTTCGCTGTCGCGAGCGGCGGCGGCGGCGCTGG 660  
Db 601 TGATGGGCGCCAAATGCAKCGCGGGTTCGCTGTCGCGAGCGGCGGCGGCGGCGCTGG 660  
QY 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705  
Db 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

RESULT 14  
US-09-285-306-11  
; Sequence 11, Application US/09285306A

Db 601 TGATGGGGCCCAACATGCAGCGCTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
Qy 661 TGGGCACCGGATGAGCTGCGCGGGCGATGACGCGCGAGCT 705  
Db 661 TGGGCACCGGATGAGCTGCGCGGGCGATGACGCGCGAGCT 705  
RESULT 15  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 96.9%; Score 683; DB 9; Length 705;  
Best Local Similarity 96.9%; Pred. No. 3.4e-147;  
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGAGGCGATCACCGGAGACCTGTATCAATCCGTCCCGTCTGTGGCGG 60  
Db 1 CCCAGGACGTGAGGCGATCACCGGAGACCTGTATCAATCCGTCCCGTCTGTGGCGG 60  
Qy 61 CGATCAAGGAGTCTTTCGGACACGAGCGAGCTGCCAGTTCATGGACCAAGACACCGC 120  
Db 61 CGATCAAGGAGTCTTTCGGACACGAGCGAGCTGCCAGTTCATGGACCAAGACACCGC 120  
Qy 121 TGTCCGGGCTCACCACAAAGCGCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180  
Db 121 TGTCCGGGCTCACCACAAAGCGCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180  
Qy 181 AGCGGCGCGGCTGGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240  
Qy 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGTATCGGCTCGCTCGGTGTACGCGGGG 300  
Db 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGTATCGGCTCGCTCGGTGTACGCGGGG 300  
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGAAGTGGTTCGACGGCGGTCTACCG 360  
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGAAGTGGTTCGACGGTGTGTCACCG 360  
Qy 361 ACGAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGTGGTGGCGGAGCCCAACT 420  
Db 361 ACGAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGTGGTGGCGGAGCCCAACT 420  
Qy 421 CGCGGATCGACGGCAAGGGCGGTTCCCGAGGCGCGGTCTGTTCCGCGGAGGCGG 480  
Db 421 CGCGGATCGACGAAGGGCGGTTCCGAGGAGKCCCGGTTCTGTTCCGCGSAGGCGG 480  
Qy 481 GCGAGGTGAGTACGTGCTCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGGCCARA 540  
Db 481 GCGAGGTGAGTACGTGCTCCCTCGTCCGAGTGGACTACATGGAGTGTGCGCGGCCAGA 540  
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTCCC 600  
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCCAACCGTCCC 600

Qy 601 TGATGGGGCCCAACATGCAGCGCTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
Db 601 TGATGGGGCCCAACATGCAGCGCTTCCGCTGGTGGCGAGCGCGCGCTGG 660  
Qy 661 TGGGCACCGGATGAGCTGCGCGGGCGATGACGCGCGAGCT 705  
Db 661 TGGGCACCGGATGAGCTGCGCGGGCGATGACGCGCGAGCT 705

Search completed: August 20, 2004, 01:36:35  
Job time : 408.972 secs

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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-4  
Perfect score: 705  
Sequence: 1 ccagcagctggagcgatc.....ggcgatcagcgaggcagt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA.\*  
1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq.\*  
2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq.\*  
3: /cgn2\_6/ptodata/2/ina/6A\_COMB.seq.\*  
4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq.\*  
5: /cgn2\_6/ptodata/2/ina/PTUS\_COMB.seq.\*  
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	85.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-520-946-138
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-08-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11335	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appli
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

## ALIGNMENTS

### RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Iubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

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; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC I551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 3,9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY      1  CCCAGACGTGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db      762963  CCCAGACGTGAGGCGGATCAACCGCAGACGTTGATCAACATCCGGCCGCTGGTCGCCG 763022

QY      61  CGATCAAGAGATTCTTGGCGACCGACGTCGAGCCAATTCATGGACCGAACAACCCCGC 120
Db      763023  CGATCAAGAGATTCTTGGCGACCGACGTCGAGCCAATTCATGGACCGAACAACCCCGC 763082

QY      121  TGTGCGGGCTCAACCAACAGCCCGCTCTCGCGCTGGCGCGCGGTGTCTCTCCCGGG 180
Db      763083  TGTGCGGGTTGACCAACAAGCCCGACTGTGCGCGCTGGCGCGCGGTGTCTCTCACGTG 763142

QY      181  AGCGGCGCGGGCTGGAGGTCGCGACGTCACCCGTCCCACTCCCACTACGGCCGGATGTGCCGA 240
Db      763143  AGCGTGC CGGGCTGGAGGTCGCGACGTCGACCCGTGCACTACGGCCGGATGTGCCGA 763202

QY      241  TCGAGACCCGGAGGGTCCCAACATCGTCTGATCGCTCGCTGTCGGTGTATGCGCGGG 300
Db      763203  TCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGCTCGCTGTCGGTGTATGCGCGGG 763262

QY      301  TCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db      763263  TCNACCCGTTTCGGGTTTCATCGAAACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTTAGCG 763322

QY      361  ACAGATTCACATCTGACCGCCGACGAGGAGACCGCACGTGGTGGCGCAGCCCAACT 420
Db      763323  ACAGATTCGTGTACCTGACCGCCGACGAGGAGACCGCACGTGGTGGCACAGGCCCAATT 763382

QY      421  CGCCGATCGAGTACGAGGCGCGGTTCGCGAGGCGCGGGTTCGCTGGTCCGCGCGAAGCGG 480
Db      763383  CGCCGATCGATCGGACGCGTTCGTTGTCGAGCCGCGCTGCTGCTCGCGCGCAAGCGG 763442

QY      481  GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGAATCATGAGAGTGTGCGCGGCCGAGA 540
Db      763443  GCGAGTTCGAGTACGTGCCCTCGTTCGAGTGAATCATGAGAGTGTGCGCGGCCGAGA 763502

QY      541  TGTGTTCGTTGGCCACCGGATATCCGTTCTTCGAGACGACGACGCGCAACCGTGC 600
Db      763503  TGTGTTCGTTGGCCACCGGATATTCCTTCTTGGAGACGACGACGCGCAACCGTGC 763562

QY      601  TGATGGCGGCCAACATCAGCGCCGAGCGGTTCCGCTGGTTCGCGACGAGCGCGCGCTGG 660
Db      763563  TCATGGGCGCAACATCAGCGCCGAGCGGTTCCGCTGGTTCGCTGGTTCGCGAGCGCGCTGG 763622

QY      661  TGGGACCGGATGGAGCTGGCGCGCGGATCGACGCGG 699
Db      763623  TGGGACCGGATGGAGCTGGCGCGCGGATCGACGCGG 763661

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```

; INFORMATION FOR SEQ ID NO: 24:				
; SEQUENCE CHARACTERISTICS:				
; LENGTH: 706 base pairs				
; TYPE: nucleic acid				
; STRANDEDNESS: single				
; TOPOLOGY: linear				
; MOLECULE TYPE: cDNA				
US-08-797-812-24				
Query Match	86.8%;	Score 610.6;	DB 3;	Length 706;
Best Local Similarity	91.6%;	Pred. No. 8.1e-112;		
Matches 646;	Conservative	0;	Mismatches 59;	Indels 0;
Gaps	0;			
QY	1	CCGAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCAGTGGCGG	60	
DB	2	CCGAGACGCTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGTCAGTGGCGG	61	
QY	61	CGATCAAGGAGTTCTTTCCGACACGACGACGCTGCCCAATGTCACGACCAACACCCG	120	
DB	62	CGATCAAGGAGTTCTTTCCGACACGACGACGCTGAGCCAAATTCATGGACCAACACCCG	121	
QY	121	TGTCGGGGCTACCCACACGACGCGGCTGTGCGGCTGGGCGCGGCTGTGTCGCCGG	180	
DB	122	TGTCGGGGTTGACCCCAACGCGCGACTGTGCGGCTGGGCGCGGCTGTGTCACGTG	181	
QY	181	AGCGGCGCGGCTGGAGGTCCGACGCTGCACCCGTCGCCACTACGCGCGGATGTGCCGA	240	
DB	182	AGCGTCGCGGCTGGAGGTCCGACGCTGCACCCGTCGCCACTACGCGCGGATGTGCCGA	241	
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCGTATCGGCTCGCTGTCGGTGTATCGCGGG	300	
DB	242	TCGAAACCCCTGAGGGGCCCAACATCGGTCGTATCGGCTCGCTGTCGGTGTATCGCGGG	301	
QY	301	TCRAACCGTTCGGGTTTCATGAGACGCGGTACCCGAGGTGGTGCACGCGGTGTACCG	360	
DB	302	TCRAACCGTTCGGGTTTCATGAAACGCGGTACCCGAGGTGGTGCACGCGGTGTATCGG	361	
QY	361	ACGAGATCCACTACTCAGCCGCCACGAGGAGGACCGCCAGTGGTGGCGGAGGCCAACT	420	
DB	362	ACGAGATCGGTACTGACGCCGACGAGGAGGACCGCCAGTGGTGGCGGAGGCCAACT	421	
QY	421	CGCCGATCGACGACGAAGGGCCGGTTGCGGAGGCGCGGGTGTGTCGCGCGCAAGGCGG	480	
DB	422	CGCCGATCGATCGGACGCGTTCGTCGAGCGCGCGTGTGTCGCGCGCGCAAGGCGG	481	
QY	481	GCGAGGTGAGTACGTGCGCTCGTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540	
DB	482	GCGAGGTGGAGTACGTGCGCTCGTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	541	
QY	541	TGGTGTGCGTGGCCACCGCATGATCCCGTTTCCTCGAGCAGACGACGCCAACCGTGCC	600	
DB	542	TGGTGTGCGTGGCCACCGCATGATCCCTTCCTGGAGCAGACGACGCCAACCGTGCC	601	
QY	601	TGATGGGCGCAACATCGACGCGCAGGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG	660	
DB	602	TCATGGGGCAACATCGACGCGCAGGCGGTCGCGCTGGTTCGATGCGAGGCGCGCTGG	661	
QY	661	TGGGACCGGATGAGGTGCGCGCGGCGATCGACGCGCGGACGT	705	
DB	662	TGGGACCGGATGAGTGC CGCGGCGATCGACGCGCGGACGT	706	
RESULT 2				
US-09-103-840A-2				
; Sequence 2, Application US/09103840A				
; Patent No. 6294328				
; GENERAL INFORMATION:				
; APPLICANT: FLEISCHMAN, Robert D.				
; APPLICANT: WHITE, Owen R.				
; APPLICANT: FRASER, Claire M.				
; APPLICANT: VENTER, John C.				
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM				
; TITLE OF INVENTION: TUBERCULOSIS				

Query Match	85.5%	Score 603	DB 3	Length 4411529
Best Local Similarity	91.4%	Pred. No. 3.9e-110		
Matches 639	Conservative 0	Mismatches 60	Indels 0	Gaps 0
QY 1	CCCAGGAGCTGGAGCGCATCAACCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG	60		
Db 761003	CCCAGGAGCTGGAGCGCATCAACCGACAGCTTGATCAACATCCGCCGTGGTCGCG	761062		
QY 61	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTGTCCTAGTTATGACACAGAACACCCGC	120		
Db 761063	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTGAGCAATTCATGGACAGAACACCCGC	761122		
QY 121	TGTCGGGGCTCACCCACAAGCGCGCCTGTGCGGCTCGGCCCGGTCGTCTGTCCCGGG	180		
Db 761123	TGTCGGGGTTGACCCACAAGCGCGACTGTGCGGCTGGGGCCCGCGGTCTGTCACTG	761182		
QY 181	AGCGGCGGGCTGAGGTCGCGACAGTGACCCGTCCTCCACTACCGCCGAGTGTCCCGGA	240		
Db 761183	AGCGTGGCGGGCTGAGGTCGCGACAGTGACCCGTCCTCCACTACCGCCGAGTGTCCCGGA	761242		
QY 241	TCGAGACCCCGGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCGCTGTATGCGGG	300		
Db 761243	TCGAAACCCCTGAGGGCCCAACATCGTCTGTATCGGCTCGCTGTCGCTGTACGCGGG	761302		
QY 301	TCAACCCGCTCGGGTTTCATCGAGACGCCGTACCGCAAGTGGTTCGACGCGGTGTTCACCG	360		
Db 761303	TCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGCAAGTGGTTCGACGCGGTGTTCACCG	761362		
QY 361	ACGAGATCCACTACTCTGACGCCACAGGAGGACCGCACTGTGTGCGCAGGCCAACT	420		
Db 761363	ACGAGATCGTGTACTCTGACGCCACAGGAGGACCGCACTGTGTGCGCAGGCCAACT	761422		
QY 421	CGCCGATCGACGACAAGGGCGGTTTCGCGAGGGCCCGGGTCTGTCTCGCCGCAAGCGGG	480		
Db 761423	CGCCGATCGATCGGACGGTTCGTTCTGTCGAGCCCGCGTCTGTCTCGCCGCAAGCGGG	761482		
QY 481	GCAGGTCGAGTAGCTGCGCTCTGCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540		
Db 761483	GCAGGTCGAGTAGCTGCGCTCTGCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	761542		
QY 541	TGTTGTCTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTGCC	600		
Db 761543	TGTTGTCTGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTGCC	761602		
QY 601	TGATGGCGCCACATCAGCGCCGAGCGGTTCCGCTGGTTCGAGGAGCGAGCGCGCGTGG	660		
Db 761603	TCATGGGGGCAACATCAGCGCCGAGCGGTCGCTGGTTCGATGAGGAGCGCGCGTGG	761662		
QY 661	TGGGCACCGGCATGGAGCTCGCGCGCGATCGACGGG	699		
Db 761663	TGGGCACCGGCATGGAGCTCGCGCGCGATCGACGGG	761701		

RESULT 4  
US-08-313-185-57

```

: Sequence 57, Application US/08313185
: Patent No. 5851763
: GENERAL INFORMATION:
: APPLICANT: Heym, Beate
: APPLICANT: Cole, Stewart
: APPLICANT: Young, Douglas
: APPLICANT: Zhang, Ying
: APPLICANT: Honore, Nadine
: APPLICANT: Teienti, Amalio
: APPLICANT: Bodmer, Thomas
: TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
: TITLE OF INVENTION: in Mycobacterium Tuberculosis
: NUMBER OF SEQUENCES: 66
: CORRESPONDENCE ADDRESS:
: ADDRESS: Finnegan, Henderson, Farabow, Garrett &
: ADDRESS: Dunner
: STREET: 1300 I Street, N.W.
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20005-3315
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/313,185
: FILING DATE: 12-OCT-1994
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Meyers, Kenneth J.
: REGISTRATION NUMBER: 25,146
: REFERENCE/DOCKET NUMBER: 02356..0068-00000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (202) 408-4000
: TELEFAX: (202) 408-4400
: INFORMATION FOR SEQ ID NO: 57:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 3447 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: US-08-313-185-57

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Query Match	79.2%	Score 558.2;	DB 2;	Length 3447;
Best Local Similarity	87.4%;	Pred. No. 1.7e-101;		
Matches	611;	Conservative 0;	Mismatches 88;	Indels 0; Gaps 0;
QY 1	CCGAGCAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG	60		
Db 1124	CCGAGCAGCTGCGAGGCGATCACCGCCAGACGCTGATCAATATCCGTCGCGTGTGTCGCG	1183		
QY 61	CGATCAAGGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGATTCAATGGACACGAAACAACCCGC	120		
Db 1184	CTATCAAGGAATCTTTCGGCACCCAGCCAGCTGTCCAGATTCAATGGATCAGAACACCCCTC	1243		
QY 121	TGTCGGGGTCAACCAACAAGCGCGCGCTGTGCGCGCTGGCGCGGCTGTCTCTGCCGGG	180		
Db 1244	TGTGCGGCGCTGACCCACAAGCGCGCGCTGTGCGCGCTGGCGCGGCTGTCTGTCGCGTG	1303		
QY 181	AGCGGCGCGGGCTGGAGGTCCCGGACGTGACCCGTCACACTACGGCGCGATGTGCCCGA	240		
Db 1304	ACGTCGCCGGGCTAGAGGTCCGAGCGTGCACCCCTTCGCACCTACGGCCGCGATGTGCCCGA	1363		
QY 241	TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGTCGCGGG	300		
Db 1364	TCGAGACTCGGAGGGCCCGAACATAGGTCTGATCGGTTCATTGTCTGGTGTACGCGCGGG	1423		
QY 301	TCAACCCGTTCCGGTTATCGAGACGCCGTAACGCAAGTGTGTGACGCGCGGTGGTCACCG	360		
Db 1424	TCAACCCCTTCGGGTTATCGAGAACCCGTAACCGCAAGTGTTACCGTGTGGTTCACCG	1483		



TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-09-082-614A-57

Query Match 79.2%; Score 558.2; DB 3; Length 3447;  
Best Local Similarity 87.4%; Pred. No. 1.7e-101;  
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGAGTGTGAGGCGATCACACGCGACACCTGATCAACATCCCTCCAGTCTGTCGCGG 60  
DB 1124 CCCAGAGTGTGAGGCGATCACACGCGACACCTGATCAATATCCCTCCGCTGTCGCG 1183  
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC 120  
DB 1184 CTATCAAGAAATTCCTTCGGCACCAGCCAGCTGTGCGAGTTCATGATCAGAACACCC 1243  
QY 121 TGTGCGGGGTACCCCAAGAGCGCGCTGTGCGCGTGGGCGCGGCTGCTCTGTCGCGG 180  
DB 1244 TGTGCGGGGTACCCCAAGAGCGCGCTGTGCGCGTGGGCGCGGCTGCTCTGTCGCGG 1303  
QY 181 AGCGGCGCGGCTGAGAGTCCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTGCCGA 240  
DB 1304 AGCGTCCCGGCTAGAGGTCCGCGAGTGCACCCCTTCGCACTACGCGCGGATGTGCCGA 1363  
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTGCTGTGCTGTATGCGCGG 300  
DB 1364 TCGAGACTCGGAGGGCGCCCAACATAGGTCTGATCGGTTCATTCGCTGTACGCGGG 1423  
QY 301 TCAACCCGTTGCGGTTCATCGAGACCGCGTACCGCAAGTGTGCGAGCGGTGTACCG 360  
DB 1424 TCAACCCGTTGCGGTTCATCGAAACACCCGTACCGCAAGTGTGCGGTGTGCGAGCGG 1483  
QY 361 ACAGATGCCACTACCTGACCGCGAGGAGGAGGACCGCCACGTGCTGCGCGCAGGCCAACT 420  
DB 1484 ACAGATGCGAATCTTACCGCTGACGAGGAGGAGGACCGCCATGCTGCTGCGCGCAGGCCAACT 1543  
QY 421 CGCGGATCGACGACAAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTGCTGCGCGCAGGCGG 480  
DB 1544 CGCGGATCGACGAGGCGCGCGCTTCCTCGAGCGCGCGCTGCTGCTGCTGCGCGCAGGCGG 1603  
QY 481 GCGAGGTGAGTACGTCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCGCAGA 540  
DB 1604 GCGAGGTGAGTACGTCCTCGTCCGAGTGGATTACATGAGTGTCTCGCCAGCGCAGA 1663  
QY 541 TGTGTCGCTGGCCACCGCGATATCCCGTTCCTTCGAGCAGCAGCAGCCCAACCGTCCC 600  
DB 1664 TGTGTCGCTGGCCACCGCGATATTCCTGTTGAGCAGCAGCAGCCCAACCGTCCC 1723  
QY 601 TGATGGCGCCCAACATCGAGCGCGGCTGCGCTGCTGCTGCTGCGAGCGCGCGCTGG 660  
DB 1724 TGATGGCGCCCAACATCGAGCGCGGCTGCGCTGCTGCTGCTGCGAGCGCGCGCTGG 1783  
QY 661 TGGCAGCGGATGAGCTGCGCGCGGCGGATCGAGCGG 699  
DB 1784 TGGTACCGGTATGAGTTGCGCGCGGCGGATCGAGCGG 1822

RESULT 6  
US-08-250-030-1  
Sequence 1, Application US/08250030  
Patent No. 5643723  
GENERAL INFORMATION:  
APPLICANT: Persing, David H.  
TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
TITLE OF INVENTION: Clinical Specimens  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Schwegman, Lundberg & Woessner  
STREET: 3500 IDS Center  
CITY: Minneapolis  
STATE: MN  
COUNTRY: USA

QY 361 ACAGATGCCACTACCTGACCGCGAGGAGGAGGACCGCCACGTGCTGCGCGAGGCCAACT 420  
DB 1484 ACAGATGCCACTACCTGACCGCGAGGAGGAGGACCGCCACGTGCTGCGCGAGGCCAACT 1543  
QY 421 CGCGGATCGACGACAAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTGCTGCGCGCGCAGA 480  
DB 1544 CGCGGATCGACGAGGCGCGCGTTCCTCGAGCGCGCGGCTGCTGCTGCTGCGCGCGCAGA 1603  
QY 481 GCGAGGTGAGTACGTCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCGCAGA 540  
DB 1604 GCGAGGTGAGTACGTCCTCGTCCGAGTGGATTACATGAGTGTCTCGCCAGCGCAGA 1663  
QY 541 TGTGTCGCTGGCCACCGCGATATCCCGTTCCTTCGAGCAGCAGCAGCCCAACCGTCCC 600  
DB 1664 TGTGTCGCTGGCCACCGCGATATTCCTGTTGAGCAGCAGCAGCCCAACCGTCCC 1723  
QY 601 TGATGGCGCCCAACATCGAGCGCGGCTGCGCTGCTGCTGCTGCGAGCGCGCGCTGG 660  
DB 1724 TGATGGCGCCCAACATCGAGCGCGGCTGCGCTGCTGCTGCTGCGAGCGCGCGCTGG 1783  
QY 661 TGGCAGCGGATGAGCTGCGCGCGGCGGATCGAGCGG 699  
DB 1784 TGGTACCGGTATGAGTTGCGCGCGGCGGATCGAGCGG 1822

RESULT 5  
US-09-082-614A-57  
Sequence 57, Application US/09082614A  
Patent No. 6124098  
GENERAL INFORMATION:  
APPLICANT: Heym, Beate  
APPLICANT: Cole, Stewart  
APPLICANT: Young, Douglas  
APPLICANT: Zhang, Ying  
APPLICANT: Honore, Nadine  
APPLICANT: Telenti, Amelio  
APPLICANT: Bodmer, Thomas  
TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance  
TITLE OF INVENTION: in Mycobacterium Tuberculosis  
NUMBER OF SEQUENCES: 66  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
ADDRESSEE: Dunner  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA: US/09/082,614A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/313,185  
FILING DATE: 12-OCT-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Meyers, Kenneth J.  
REGISTRATION NUMBER: 25,146  
REFERENCE/DOCKET NUMBER: 02356.0068-00000  
TELEPHONE: (202) 408-4000  
TELEFAX: (202) 408-4400  
INFORMATION FOR SEQ ID NO: 57:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3447 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single

ZIP: 55402  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 FILING DATE: 26-MAY-1994  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Mueeting, Ann M.  
 REGISTRATION NUMBER: 33,977  
 REFERENCE/DOCKET NUMBER: 150.105US1  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 612-339-0331  
 TELEFAX: 612-339-3061  
 INFORMATION FOR SEQ ID NO: 1:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 970 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA  
 US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
 QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCCGTGGGG 60  
 Db 341 CCCAGGACGTGGAGGCGATCACACCGCAGAGTGTGATCAACATCGGCGCGGTGGCGG 400  
 QY 61 CGATCAAGGAGTCTTTCGGACCAACCGCAGCTGTCCAGTTCATGACACAGAACACCGC 120  
 Db 401 CGATCAAGGAGTCTTTCGGACCAACCGCAGCTGTGATCAACATCGGCGCGGTGGCGG 460  
 QY 121 TGTGGGGCTCACCAACAGCGCGCTGTGCGCGTGTGGCGCGGTGGTGTGTTCGCGG 180  
 Db 461 TGTGGGGCTTACCCCAACAGCGCGCTGTGCGCGTGTGGCGCGGTGGTGTGTTCGCGG 520  
 QY 181 AGCGGGCGGCGTGGAGTCCCGGACCGCAGCTGTGATCGGCTCGCTGTGATCGGCTGATCGG 240  
 Db 521 AGCGTGGCGGCTGGAGTCCCGGACCGCAGCTGTGATCGGCTCGCTGTGATCGGCTGATCGG 580  
 QY 241 TCAGAGCCCCCGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 300  
 Db 581 TCAGAGCCCCCGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 640  
 QY 301 TCAGAGCCCCCGAGGCTCCCAACATCGGCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 360  
 Db 641 TCAGAGCCCCCGAGGCTCCCAACATCGGCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 700  
 QY 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420  
 Db 701 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 760  
 QY 421 CGCGGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 480  
 Db 761 CGCGGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 820  
 QY 481 GCGAGGTCGAGTACGTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCT 540  
 Db 821 GCGAGGTCGAGTACGTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCT 880  
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 600  
 Db 881 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 940  
 QY 601 TGATGGCGCCCAACATCGAGCGCGAGCGG 630  
 Db 941 TCATGGGGGCAACATCGAGCGCGAGCGG 970

RESULT 7  
 PCT-US95-06790-1  
 ; Sequence 1, Application PC/TUS9506790  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Mayo Foundation for Medical Education and Research  
 ; APPLICANT: and Hoffmann-La Roche Inc.  
 ; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
 ; TITLE OF INVENTION: Resistance to Rifampin  
 ; NUMBER OF SEQUENCES: 15  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Schwegman, Lundberg & Woessner  
 ; STREET: 3500 IDS Center  
 ; CITY: Minneapolis  
 ; STATE: MN  
 ; COUNTRY: USA  
 ; ZIP: 55402  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: PCT/US95/06790  
 ; FILING DATE: 26-MAY-1995  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Raasch, Kevin W.  
 ; REGISTRATION NUMBER: 35,651  
 ; REFERENCE/DOCKET NUMBER: 150.105W01  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 612-339-0331  
 ; TELEFAX: 612-339-3061  
 ; INFORMATION FOR SEQ ID NO: 1:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 970 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA  
 PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;  
 Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
 QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCCGTGGCGG 60  
 Db 341 CCCAGGACGTGGAGGCGATCACACCGCAGACCTGTGATCAACATCGGCGCGGTGGTCGCG 400  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCGC 120  
 Db 401 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTGAGCCAAATTCATGACACAGAACACCGC 460  
 QY 121 TGTGGGGCTCACCAACAGCGCGCTGTGCGCGTGTGGCGCGGTGGTGTGTTCGCGG 180  
 Db 461 TGTGGGGCTTACCCCAACAGCGCGCTGTGCGCGTGTGGCGCGGTGGTGTGTTCGCGG 520  
 QY 181 AGCGGGCGGCGTGGAGTCCCGGACCGCAGCTGTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 240  
 Db 521 AGCGTGGCGGCTGGAGTCCCGGACCGCAGCTGTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 580  
 QY 241 TCAGAGCCCCCGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 300  
 Db 581 TCAGAGCCCCCGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 640  
 QY 301 TCAGAGCCCCCGAGGCTCCCAACATCGGCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 360  
 Db 641 TCAGAGCCCCCGAGGCTCCCAACATCGGCTGATCGGCTCGCTGTGATCGGCTGATCGGCGGG 700  
 QY 361 ACAGATCCACTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCT 420

Db

701

ACGAGATCGTGACCTGACCGCCGACGAGGAGGACCGCCACGTCGTGGACAGGCCAATT

760

Qy

421

CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTGCTGTGTCGCCGCAAGGCGG

480

Db

761

CGCCGATCGATCGAGCGGTCGTTTCGTGAGCGCGCGGTGCTGTGTCGCCGCAAGGCGG

820

Qy

481

CGGAGGTGAGTACGTGCGGCTCGTCGGAGGTGGACTACATGACGTGTGCGCGCCGACA

540

Db

821

CGGAGGTGAGTACGTGCGGCTCGTCGTGAGGTGGACTACATGACGTGTGCGCGCCGACA

880

Qy

541

TGCTGTGCGTGCGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGC

600

Db

881

TGCTGTGCGTGCGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGC

940

Qy

601

TCATGGGCGCCAAACATGACGCGCCAGGCGG

630

Db

941

TCATGGGCGCCAAACATGACGCGCCAGGCGG

970

RESULT 8

US-08-757-653-135

; Sequence 135, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Medlen & Carroll, LLP

; STREET: 220 Montgomery Street, Suite 2200

; CITY: San Francisco

; STATE: California

; COUNTRY: United States Of America

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/757,653

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Ingolia, Diane E.

; REGISTRATION NUMBER: 40,027

; REFERENCE/DOCKET NUMBER: FORS-02565

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-757-653-135

Query Match

Best Local Similarity

Matches

564;

Conservative

0;

Mismatches

56;

Indels

0;

Gaps

0;

Qy

36

ATCAACATCGTCCAGTCGTGGCGGCGATCAAGAGTTCTTCGGCACGACGACGCTGTC

95

Db

1

ATCAACATCGGCGGTGTCGCCGCGATCAAGAGTTCTTCGGCACGACGACGCTGAGC

60

Qy

96

CAGTTTCATGGACCAAGAACCCCGCTGTGCGGGTCAACCAAGCCGCGCTGTGCGG

155

Db

61

CAATTCATGACCAAGAACCCCGCTGTGCGGGTTGACCCCAAGCGCCGACTGTGCGG

120

Qy

156

CTGGCCCGGGTGGTCTGTCCCGGAGCGGGCCGGCTGGAGTCCGCGACGTGCACCGG

215

Db

121

CTGGGCGCGCGGGTCTGTACGTGAGCGTCCCGGGCTGGAGTCCGCGACGTGCACCGG

180

Qy

216

TCCCACTACGGCGCGGATGTGCCGATCGAGACCCCGGAGGTTCCAAACATCGGTCTGATC

275

Db

181

TGCACACTACGGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC

240

Qy

276

GGCTCGCTGTGCGTGTATGCGCGGGTCAACCCGTTGGGTTTCATCGAGACGCGGTACCGC

335

Db

241

GGCTCGCTGTGCGTGTATGCGCGGGTCAACCCGTTGGGTTTCATCGAAACGCGGTACCGC

300

Qy

336

AAAGTGGTTCGCGCGGTGTACCCGACGAGATCCACTACTACCGCCCGACGAGGAGGAC

395

Db

301

AAAGTGGTTCGCGCGGTGTGTAGCGACGAGATCGTACTCTGACCCGCGCAGGAGGAC

360

Qy

396

CGCCACGTGTTGGCGCAGGCCAACTCGCGATCGACGACAAAGGCGCGTTCCGGGAGGCC

455

Db

361

CGCCACGTGTTGGCGCAGGCCAACTCGCGATCGACGACGCGTTCGTCGAGCGG

420

Qy

456

CGGCTGCTGTTCCGCGCGGAGGCGGCGAGTCTGAGTCTGCGTCCGAGGTGGAC

515

Db

421

CGGCTGCTGTTCCGCGCGGAGGCGGCGAGTCTGAGTCTGCGTCCGAGGTGGAC

480

Qy

516

TACATGGACGTGTGCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC

575

Db

481

TACATGGACGTGTGCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC

540

Qy

576

GAGCACGACGCGCCAAACCGTCCCTGTATGGGCGCCAAATGAGCGCGGTTCCGCGGTTCCG

635

Db

541

GAGCACGACGCGCCAAACCGTCCCTGTATGGGCGCCAAATGAGCGCGGTTCCGCGGTTCCG

600

Qy

636

CTGGTCCGCGACGAGGCGGC

655

Db

601

CTGGTCCGCGACGAGGCGGC

620

RESULT 9

US-08-757-653-138/c

; Sequence 138, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Medlen & Carroll, LLP

; STREET: 220 Montgomery Street, Suite 2200

; CITY: San Francisco

; STATE: California

; COUNTRY: United States Of America

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/757,653

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Ingolia, Diane E.

; REGISTRATION NUMBER: 40,027

; REFERENCE/DOCKET NUMBER: FORS-02565

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-757-653-138

Query Match

Best Local Similarity

Matches

564;

Conservative

0;

Mismatches

56;

Indels

0;

Gaps

0;

Qy

36

ATCAACATCGTCCAGTCGTGGCGGCGATCAAGAGTTCTTCGGCACGACGACGCTGTC

95

Db

1

ATCAACATCGGCGGTGTCGCCGCGATCAAGAGTTCTTCGGCACGACGACGCTGAGC

60

Qy

96

CAGTTTCATGGACCAAGAACCCCGCTGTGCGGGTCAACCAAGCCGCGCTGTGCGG

155

Db

61

CAATTCATGACCAAGAACCCCGCTGTGCGGGTTGACCCCAAGCGCCGACTGTGCGG

120

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;
; SEQUENCE CHARACTERISTICS:
;
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; MOLECULE TYPE: DNA (genom
US-08-757-653-138

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Query Match	75.2%	Score 530.4;	DB 2;	Length 620;
Best Local Similarity	91.0%;	Pred. No. 4.6e-96;		
Matches 564; Conservative	0;	Mismatches 56;	Indels	0

36	ATCAACATCCGTCCAGTCTGGCGCGCATCAAGAGTCTTTCGGCAACAGCAGCTGTC	95
Db		
620	ATCAACATCCGGCGGTGGTGGCGCGATCAAGAGTCTTTCGGCAACAGCAGCTGAGC	561
QY		
96	CAGTTCATGACACAGAAACCCGCTCTCGGGGCTCACCCACAAAGCGCCGCTTCGGCG	155
Db		
560	CAATTATGACACAGAACACCCGCTCTCGGGTTGACCCAAAGCGCCGACTGTCGGCG	501
QY		
156	CTGGGCCGGGTGTGTCTCCGGAGCGGCGGGCTGGAGTCCGCGACGTGCACCCG	215
Db		
500	CTGGGGCCCGCGGTCTGTCACTGAGCGTGGGGCTGGAGTCCGCGACGTGCACCCG	441
QY		
216	TCCCACTACGGCCGAGTGCCTCGATCGAGACCCCGAGGTCCTCAACATCGTCTGATC	275
Db		
440	TCCCACTACGGCCGAGTGCCTCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC	381
QY		
276	GGCTCGCTGTTCGGTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGACGCGTACCGC	335
Db		
380	GGCTCGCTGTTCGGTGTACGCGGGTCAACCCGTTCCGGTTTCATCGAAACGCGTACCGC	321
QY		
336	AAGTGGTGCACGGCGTGGTCAACGACGAGATCCACTCTGACCGCGCGACGAGGAGAC	395
Db		
320	AAGTGGTGCACGGCGTGGTTCAGCAGAGATCGTGACCTGACCGCGACGAGGAGAC	261
QY		
396	CGCCAGTGTGGCGAGGCGCACTCGCCGATCGACGACAAAGGCGCGTTCGCGAGGCC	455
Db		
260	CGCCAGTGTGGCGACAGGCGCAATTCCCGATCGATGCGGACGGTTCGTCGAGCGC	201
QY		
456	CGGGTCTGGTCCGCGCAAGCGGGCGAGGTCGAGTACGTGCGCTCTGTCGAGGTGGAC	515
Db		
200	CGCGTCTGGTCCGCGCAAGCGGGCGAGGTGGAGTACGTGCGCTCTGTCGAGGTGGAC	141
QY		
516	TACATGGAGTGTCCGCGCGCAGATGGTGTTCGGTGGCCACCGCGATGATCCCGTTCCTC	575
Db		
140	TACATGGAGCTCTCGCCCGCCAGATGGTGTTCGGTGGCCACCGCGATGATCCCTTCCTG	81
QY		
576	GAGCAGCAGCGCCAAACCGTGCCTGATGGGCGCCAAACATGACGCGCCAGGGGTCG	635
Db		
80	GAGCAGCAGCAGCCAAACCGTGCCTCATGGGGGCAACATGACGCGCCAGGGGTCG	21
QY		
636	CTGGTGGCAGCGAGCGCC	655
Db		
20	CTGGTCCGTAGCGAGGCC	1

## RESULT 10

```

US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET,
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

```

, COUNTRY: UNITED STATES OF AMERICA
, ZIP: 94104
, COMPUTER READABLE FORM:
, MEDIUM TYPE: Floppy disk
, COMPUTER: IBM PC compatible
, OPERATING SYSTEM: PC-DOS/MS-DOS
, SOFTWARE: Patentin Release #1.0.
, CURRENT APPLICATION DATA:
, APPLICATION NUMBER: US/08/520,946
, FILING DATE:
, CLASSIFICATION: 435
, ATTORNEY/AGENT INFORMATION:
, NAME: CARROLL, PETER G.
, REGISTRATION NUMBER: 32,837
, REFERENCE/DOCKET NUMBER: FORS-0179
, TELECOMMUNICATION INFORMATION:
, TELEPHONE: (415) 705-8410
, TELEFAX: (415) 397-8338
, INFORMATION FOR SEQ ID NO: 135:
, SEQUENCE CHARACTERISTICS:
, LENGTH: 620 base pairs
, TYPE: nucleic acid
, STRANDEDNESS: double
, TOPOLOGY: linear
, MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

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Query Match	75.2%	Score 530.4;	DB 4;	Length 620;
Best Local Similarity	91.0%	Pred. No. 4.6e-96;		

Qy	36	ATCAACATCGTCCAGTCGTGGCGCGATCAAGAGTGTCTTCGGCACACGACCGACTGTCC	95
Db	1	ATCAACATCGGCGGTGTGCGCGCATCAAGAGTGTCTTCGGCACACGACCGACTGTGC	60
Qy	96	CAGTTCATGACGACGAACAACCGCTGTGGGGCTACCCACAGACGCGCGCTGTCCGCG	155
Db	61	CAATTATGGACAGAAACAACCGCTGTGGGGTGAACCAACAGCCCGACTGTCCGCG	120
Qy	156	CTGGGCGCGGTGTGTCTCCCGGAGCGGCGCGGGCTGAGGTGCTCCGACGCTGCACCCG	215
Db	121	CTGGGCGCGCGGTGTGTACGTGAGCGTGC CGGGCTGGAGGTCCGAGCTGCACCCG	180
Qy	216	TCCCATCTAGCGCCGATGTCCCGATCCAGACCCGCGAGGGTCCCAACATCGGTCTGATC	275
Db	181	TGCATCTAGCGCCGATGTCCCGATCAAAACCCCTGAGGGGCCAACATCGGTCTGATC	240
Qy	276	GGTCGCTGTGCGTGTATCGCGGGTCAACCCGCTTCGGGTTCATCGAGACGCGCTACCGC	335
Db	241	GGTCGCTGTGCGTGTACGCGGGTCAACCCGCTTCGGGTTCATCGAAACGCCGTACCGC	300
Qy	336	AAGGTGTCGACGGCGTGGTCAACGACGAGATCACTACCTGACCGCCGACGAGGGAC	395
Db	301	AAGGTGTCGACGGCGTGGTAGCGACGAGATCGTACCTGACCGCCGACGAGGGAC	360
Qy	396	CGCCACGTTGTGGCGACGCCAACTCGCCGATCGACACAAGGCGCGTTTCGCGGAGGCC	455
Db	361	CGCCACGTTGTGGCACAGGCCAAATTGCGCGATCGATCGGACGGTCGTTCTCGTGGACCG	420
Qy	456	CGGTCGTGTTCCGCGCAAGCGGGCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC	515
Db	421	CGGTCGTGTTCCGCGCAAGCGGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC	480
Qy	516	TACATGGACGTGTCCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCCTC	575
Db	481	TACATGGACGTCTCGCCCCCGACATGGTGTGGTGGCCACCGCGATGATCCCTTCCTG	540
Qy	576	GAGCACGACGACCAACCGTGCCTGATGGCGGCCAAATGACGCGCCAGGCGGTTCGG	635
Db	541	GAGCACGACGACCAACCGTGCCTCATGGGGCAAAATGACGCGCCAGGCGGTTCGG	600
Qy	636	CTGTGTGCGACGAGGGGCC	655

Db	601	CTGGTCCGTAGCAGGCCCC 620	
RESULT 11			
US-08-520-946-138/c			
; Sequence 138, Application US/08520946			
; Patent No. 6372424			
; GENERAL INFORMATION:			
; APPLICANT: BROW, MARY ANN D.			
; APPLICANT: LYAMICHEV, VICTOR I.			
; APPLICANT: OLIVE, DAVID M.			
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF			
; TITLE OF INVENTION: PATHOGENS			
; NUMBER OF SEQUENCES: 160			
; CORRESPONDENCE ADDRESS:			
; ADDRESSER: MEDLEN & CARROLL			
; STREET: 220 MONTGOMERY STREET, SUITE 2200			
; CITY: SAN FRANCISCO			
; STATE: CALIFORNIA			
; COUNTRY: UNITED STATES OF AMERICA			
; ZIP: 94104			
; COMPUTER READABLE FORM:			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: Patent In Release #1.0, Version #1.25			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/520,946			
; FILING DATE:			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: CARROLL, PETER G.			
; REGISTRATION NUMBER: 32,837			
; REFERENCE/DOCKET NUMBER: FORS-01756			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (415) 705-8410			
; TELEFAX: (415) 397-8338			
; INFORMATION FOR SEQ ID NO: 138:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 620 base pairs			
; TYPE: nucleic acid			
; STRANDEDNESS: single			
; TOPOLOGY: linear			
; MOLECULE TYPE: DNA (genomic)			
; US-08-520-946-138			
Query Match			75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity			91.0%; Pred. No. 4.6e-96;
Matches			564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
Qy	36	ATCAACATCCGTCAGTCGGCGGCGATCAAGAGTTCTTGGCACACCGAGCTGTC 95	
Db	620	ATCAACATCCGCGGTGGTCGGCGATCAAGAGTTCTTGGCACACCGAGCTGAGC 561	
Qy	96	CAGTTATGACAGACACCCGCTGTCGGGTCAACACAGCGCCGCTGTCGGCG 155	
Db	560	CAATTATGACAGACACCCGCTGTCGGGTGACCAAGCGCCGACTGTCGGCG 501	
Qy	156	CTGGGCCCGGTGTCTGTCGGGAGCGCGGCTGGAGGTCGCGACGTGCACCCG 215	
Db	500	CTGGGCCCGGTGTCTGTCAGTGACGTGCGGGTGGAGGTCGCGACGTGCACCG 441	
Qy	216	TCCACTACGCGCGATGTGCCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275	
Db	440	TCCACTACGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381	
Qy	276	GGCTCGCTGTGCGGTATCGCGGTCAACCGTTCCGTTTCATCGAGACCGTACCGC 335	
Db	380	GGCTCGCTGTGCGGTATCGCGGTCAACCGTTCCGTTTCATCGAAACCGCTACCGC 321	
Qy	336	AAGTGTGTCGACGGCGGTGTCACCGAGAGATCCACTACCTGACCGCGCAGAGAGAC 395	
Db	320	AAGTGTGTCGACGGCGGTGTTAGCGACGAGATCGTTACCTGACCGCGCAGAGAGAC 261	

Qy	396	CGCCACGTGGTGGCGCAGGCCAACTCGCGGATCGACGACAAGGGCCGTTTCGCGAGGCC 455	
Db	260	CGCCACGTGGTGGCGCAGGCCAAATTCGCCGATCGATCGGACGCTTCGTCGAGCGC 201	
Qy	456	CGGGTGTGGTCCGCGCGCAAGCGCGGCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515	
Db	200	CGCGTGTGGTCCGCGCGCAAGCGCGGCGAGGTGGAGTAGTGTGCTCGTCTCGAGGTGGAC 141	
Qy	516	TACATGGACGTGTCCGCGCGCAGATGGTGTGGTGGCCACCGCGATGATCCGTTCTTC 575	
Db	140	TACATGGACGTCTCGCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 81	
Qy	576	GAGCAGCAGCAGCGCAACCGTCCCTGATGGCGGCCAACATCAGCGCCAGGCGGTTCGG 635	
Db	80	GAGCAGCAGCAGCGCAACCGTCCCTCATGGGGGCAACATGACAGCCCGCGGTGGCG 21	
Qy	636	CTGGTGGCGCAGCGAGGCC 655	
Db	20	CTGGTCCGTAGCGAGGCC 1	

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSER: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match

Best Local Similarity

Matches

75.2%; Score 530.4; DB 4; Length 620;

91.0%; Pred. No. 4.6e-96;

564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 96 CAGTTTCATGACCAAGAAACACCGCTGTCGGGCTCACCCACAGCGCGGCTGTCGGG 155  
Db 61 CAATTCATGACCAAGAAACACCGCTGTCGGGTTGACCCCAAGCGCGGCTGTCGGG 120  
QY 156 CTGGCCCGGGTGTCTCTCCCGGAGCGGCGCGGCTGGAGTCCGCGAGCTGCACCG 215  
Db 121 CTGGCCCGGGTGTCTCTACGTCAGCTGAGCTGCGGGCTGGAGTCCGCGAGCTGCACCG 180  
QY 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCAAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTCGCTGATGTCGCGGATCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGC 335  
Db 241 GGCTCGCTGTCGCTGATGTCGCGGATCAACCGGTTTCGGGTTTCATCGAAACCGCTACCGC 300  
QY 336 AAGTGTGTCGACGCGGTGTCACCGACGAGATCCACTACCTGACCGCGGACGAGGAGGAC 395  
Db 301 AAGTGTGTCGACGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGGACGAGGAGGAC 360  
QY 396 CGCCACGTGTGGCGAGGCCAACTCGCCGATCGACGACAAAGGGCGGTTCCGCGAGGCC 455  
Db 361 CGCCACGTGTGGCGAGGCCAACTCGCCGATCGATGCGGACGCTCGCTCGAGCGG 420  
QY 456 CGGTGTGTCGCTGTCGCGGAGCGGAGGTGAGTACGTCGCTGCGGACCGGATCGCTCGAGCGG 515  
Db 421 CGGTGTGTCGCTGTCGCGGAGCGGAGGTGAGTACGTCGCTGCGGACCGGATCGCTCGAGCGG 480  
QY 516 TACATGACGTGTGTCGCGGACGAGATGTCGCTGCGGACCGGATGATCCCGTTCCTC 575  
Db 481 TACATGACGTGTGTCGCGGACGAGATGTCGCTGCGGACCGGATGATTCCTTCCTG 540  
QY 576 GAGCACAGACGCAACCGTGCCTGATGGCGGCCCAACATGACGCGCCAGGCGGTTCCG 635  
Db 541 GAGCACAGACGCAACCGTGCCTCATGGGGGCAACATGACGCGCCAGGCGGTTCCG 600  
QY 636 CTGTCGCGAGCGAGCGCC 655  
Db 601 CTGTCGCGAGCGAGCGCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655.378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;UNKNOWN&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (Genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTGGCGGATCAAGAGATCTTCGGGACACAGCCAGCTGTCC 95  
Db 620 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGATCTTCGGGACACAGCCAGCTGTCC 561  
QY 96 CAGTTTCATGACCAAGAAACACCGCTGTCGGGCTCACCCACAGCGCGGCTGTCGGCG 155  
Db 560 CAATTCATGACCAAGAAACACCGCTGTCGGGTTGACCCACAGCGCGGATGTCGGCG 501  
QY 156 CTGGCCCGGGTGTCTGTCCCGGAGCGGCTGGAGTCCGCGACGTCGACCCG 215  
Db 500 CTGGCCCGGGTGTCTGTACGTGAGCTGCGGGCTGGAGTCCGCGACGTCGACCCG 441  
QY 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGGAGGTTCCAAACATCGGTCTGATC 275  
Db 440 TCGCACATCGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGCTCGCTGTCGCTGATGTCGGGCTCAACCGCTTCGGGTTTCATCGAGACCGCTTACCCG 335  
Db 380 GGCTCGCTGTCGCTGATGTCGGGTTCAACCCGTTCCGGTTTCATCGAAACCGCTTACCCG 321  
QY 336 AAGTGTGTCAGCGCGTGTCCACCGAGATCCACTACCTGACCGCGGACGAGGAGGAC 395  
Db 320 AAGTGTGTCAGCGCGTGTTCAGCGAGATCGTGTACCTGACCGCGGACGAGGAGGAC 261  
QY 396 CGCCACGTGTGGCGAGGCCAACTCGCCGATCGACACAGGGCGGTTTCGCGAGGCGC 455  
Db 260 CGCCACGTGTGGCGAGGCCAACTCGCCGATCGATCGGACCGGTCGCTTCGTCAGCGC 201  
QY 456 CGGTGTGTCGCTGTCGCGGAGCGGAGTCCAGTACGTCGCTCGTCCGAGTGGAC 515  
Db 200 CGGTGTGTCGCTGTCGCGGAGCGGAGTGGAGTACGTCGCTCGTTCGAGGTGGAC 141  
QY 516 TACATGAGACGTGTGCGCGCCAGATGTCGCTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 140 TACATGAGACGTGTGCGCGCCAGATGTCGCTGGCCACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCACAGACGCAACCGTGCCTGATGGCGGCCAAACATGAGCGCCAGCGCGGTTCCG 635  
Db 80 GAGCACAGACGCAACCGTGCCTCATGGGGGCAACATGAGCGCCAGCGCGGTTCCG 21  
QY 636 CTGTCGCGAGCGAGCGCC 655  
Db 20 CTGTCGCGAGCGAGCGCC 1

## RESULT 14

US-09-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

CORRESPONDENCE ADDRESS:		CORRESPONDENCE ADDRESS:	
ADDRESSEE: Medlen & Carroll, LLP		ADDRESSEE: Medlen & Carroll, LLP	
STREET: 220 Montgomery Street, Suite 2200		STREET: 220 Montgomery Street, Suite 2200	
CITY: San Francisco		CITY: San Francisco	
STATE: California		STATE: California	
COUNTRY: United States Of America		COUNTRY: United States Of America	
ZIP: 94104		ZIP: 94104	
COMPUTER READABLE FORM:		COMPUTER READABLE FORM:	
MEDIUM TYPE: Floppy disk		MEDIUM TYPE: Floppy disk	
COMPUTER: IBM PC compatible		COMPUTER: IBM PC compatible	
OPERATING SYSTEM: PC-DOS/MS-DOS		OPERATING SYSTEM: PC-DOS/MS-DOS	
SOFTWARE: Patent In Release #1.0, Version #1.30		SOFTWARE: Patent In Release #1.0, Version #1.30	
CURRENT APPLICATION DATA:		CURRENT APPLICATION DATA:	
FILING DATE: US/08/757,653		FILING DATE: US/08/757,653	
CLASSIFICATION: 435		CLASSIFICATION: 435	
ATTORNEY/AGENT INFORMATION:		ATTORNEY/AGENT INFORMATION:	
NAME: Ingolia, Diane E.		NAME: Ingolia, Diane E.	
REGISTRATION NUMBER: 40,027		REGISTRATION NUMBER: 40,027	
REFERENCE/DOCKET NUMBER: FORS-02565		REFERENCE/DOCKET NUMBER: FORS-02565	
TELECOMMUNICATION INFORMATION:		TELECOMMUNICATION INFORMATION:	
TELEPHONE: (415) 705-8410		TELEPHONE: (415) 705-8410	
TELEFAX: (415) 397-8338		TELEFAX: (415) 397-8338	
INFORMATION FOR SEQ ID NO: 136:		INFORMATION FOR SEQ ID NO: 136:	
SEQUENCE CHARACTERISTICS:		SEQUENCE CHARACTERISTICS:	
LENGTH: 620 base pairs		LENGTH: 620 base pairs	
TYPE: nucleic acid		TYPE: nucleic acid	
STRANDEDNESS: double		STRANDEDNESS: double	
TOPOLOGY: linear		TOPOLOGY: linear	
MOLECULE TYPE: DNA (genomic)		MOLECULE TYPE: DNA (genomic)	
US-08-757-653-136		US-08-757-653-136	
Query Match		Query Match	
Best Local Similarity 90.8%; Pred. No. 9.4e-96;		Best Local Similarity 90.8%; Pred. No. 9.4e-96;	
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;		Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;	
QY	36	ATCAACATCCGTCAGTCTGCGGGGATCAAGGAGTTCTTGGACACAGCGAGTGTCC	95
DB	1	ATCAACATCCGCGGTGTGCGCGGATCAAGGAGTTCTTGGACACAGCGAGTGTCC	60
QY	96	CAGTTTCATGGACAGAACACCGCTGTGCGGGCTCACCAAGCGCGCTGTGCGGC	155
DB	61	CAATTTCATGGACAGAACACCGCTGTGCGGGCTTACCCACAAAGCGCGCTGTGCGGC	120
QY	156	CTGGGCGCGGTGTGTCGCGGGAGCGGGCTGAGGTCCGCGACGTGACCCG	215
DB	121	CTGGGCGCGGTGTGTCGCGGGAGCGGGCTGAGGTCCGCGACGTGACCCG	180
QY	216	TCCCACTACGGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC	275
DB	181	TGCACACTACGGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC	240
QY	276	GGTCTGCTGTGAGTGTGCGGGGTCAACCCGTTGGGTTCATCGAGACGCGTACCGC	335
US-08-757-653-137		US-08-757-653-137	
Query Match		Query Match	
Best Local Similarity 75.0%; Score 528.8; DB 2; Length 620;		Best Local Similarity 75.0%; Score 528.8; DB 2; Length 620;	
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;		Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;	
QY	36	ATCAACATCCGTCAGTCTGCGGGGATCAAGGAGTTCTTGGACACAGCGAGTGTCC	95
DB	1	ATCAACATCCGCGGTGTGCGCGGATCAAGGAGTTCTTGGACACAGCGAGTGTCC	60
QY	96	CAGTTTCATGGACAGAACACCGCTGTGCGGGCTCACCAAGCGCGCTGTGCGGC	155
DB	61	CAATTTCATGGACAGAACACCGCTGTGCGGGCTTACCCACAAAGCGCGCTGTGCGGC	120
QY	156	CTGGGCGCGGTGTGTCGCGGGAGCGGGCTGAGGTCCGCGACGTGACCCG	215
DB	121	CTGGGCGCGGTGTGTCGCGGGAGCGGGCTGAGGTCCGCGACGTGACCCG	180
QY	216	TCCCACTACGGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC	275
DB	181	TGCACACTACGGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC	240
QY	276	GGTCTGCTGTGAGTGTGCGGGGTCAACCCGTTGGGTTCATCGAGACGCGTACCGC	335
DB	241	GGTCTGCTGTGAGTGTACCGCGGGGTCAACCCGTTGCGGTTCATCGAAACGCGTACCGC	300
QY	336	AGGTGCTGACCGCGGTGTGACCGAGAGATCCACTACTGACCGCGCGAGGAGGAC	395
DB	301	AAGTGTGTCAGCGCGGTGTGACCGAGAGATCGTGTACTGACCGCGCGAGGAGGAC	360
QY	396	CGCCAGTGTGCGCGAGGCGCACTCGCGATCGACAGAACGGCGCGTTTCGCGGAGGC	455
DB	361	CGCCAGTGTGCGCGAGGCGCACTCGCGATCGACAGAACGGCGCGTTTCGCGGAGGC	420
QY	456	CGGGTGTGTCGCGCGCGAGGCGCGAGGTGAGTACGTGCGCCCTGTCGCGAGGTGAC	515
DB	421	CGGGTGTGTCGCGCGCGAGGCGCGAGGTGAGTACGTGCGCCCTGTCGAGGTGAC	480
QY	516	TACATGACGTGTGCGCGCGCGAGAGTGTGCGGTGGCCACCGCGATGATCCGCTTCCTC	575
DB	481	TACATGACGTGTGCGCGCGCGAGAGTGTGCGGTGGCCACCGCGATGATTCCTTCCTC	540
QY	576	GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCCAACATGACAGCGCGGTTCGCG	635



Search completed: August 19, 2004, 14:45:05  
Job time : 79.4446 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds  
(without alignments)  
8488.468 Million cell updates/sec

Title: US-09-285-306-4  
Perfect score: 705  
Sequence: 1 ccagagcgtgaggcgatc.....ggcgatcgagcgagcgt 705

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA:\*

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2:	/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:
3:	/cgn2_6/ptodata/1/pubpna/US05_NEW_PUB.seq:
4:	/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:
5:	/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:
6:	/cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:
7:	/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:
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9:	/cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:
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12:	/cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:
13:	/cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:
14:	/cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:
15:	/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:
16:	/cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:
17:	/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:
18:	/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:
19:	/cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12
8	705	100.0	705	9	US-09-285-306-13
9	705	100.0	705	9	US-09-285-306-14
10	705	100.0	705	9	US-09-285-306-16
11	705	100.0	705	9	US-09-285-306-24
12	703.4	99.8	705	9	US-09-285-306-17
13	695	98.6	705	9	US-09-285-306-3
14	693.4	98.4	705	9	US-09-285-306-11

15	691	98.0	705	9	US-09-285-306-10
16	691	98.0	3444	13	US-10-282-122A-25737
17	687	97.4	687	9	US-09-285-306-18
18	687	97.4	687	9	US-09-285-306-19
19	687	97.4	687	9	US-09-285-306-20
20	687	97.4	687	9	US-09-285-306-21
21	687	97.4	687	9	US-09-285-306-22
22	687	97.4	687	9	US-09-285-306-23
23	687	97.4	687	9	US-09-285-306-25
24	687	97.4	687	9	US-09-285-306-27
25	660.2	93.6	705	9	US-09-285-306-143
26	658.6	93.4	705	9	US-09-285-306-144
27	655.4	93.0	705	9	US-09-285-306-87
28	655.4	93.0	705	9	US-09-285-306-88
29	655.4	93.0	705	9	US-09-285-306-90
30	655.4	93.0	705	9	US-09-285-306-92
31	655.4	93.0	705	9	US-09-285-306-96
32	653.8	92.7	705	9	US-09-285-306-84
33	653.8	92.7	705	9	US-09-285-306-86
34	653.8	92.7	705	9	US-09-285-306-93
35	653.8	92.7	705	9	US-09-285-306-94
36	653.8	92.7	705	9	US-09-285-306-95
37	652.2	92.5	705	9	US-09-285-306-85
38	652.2	92.5	705	9	US-09-285-306-89
39	652.2	92.5	705	9	US-09-285-306-91
40	652.2	92.5	705	9	US-09-285-306-181
41	642.2	91.1	687	9	US-09-285-306-146
42	642.2	91.1	687	9	US-09-285-306-148
43	637.4	90.4	687	9	US-09-285-306-100
44	635.8	90.2	687	9	US-09-285-306-99
45	635.8	90.2	687	9	US-09-285-306-145

## ALIGNMENTS

RESULT 1  
US-09-285-306-4  
; Sequence 4, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match		100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity		100.0%;	Pred. No. 2.1e-154;		
Matches 705;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	CCAGGACGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGG	60		
Db	1	CCAGGACGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGG	60		
Qy	61	CGATCAAGAGGATTCCTCGGCACACCGACCGAGTCGCCAGTTCATCGACCAACACCGC	120		
Db	61	CGATCAAGAGGATTCCTCGGCACACCGACCGAGTCGCCAGTTCATCGACCAACACCGC	120		
Qy	121	TGTCGGGGCTCACCCACAGGGCGCTGTGCGGCGTGGGCGCGGTGTCGTGTCGCGG	180		
Db	121	TGTCGGGGCTCACCCACAGGGCGCTGTGCGGCGTGGGCGCGGTGTCGTGTCGCGG	180		

QY	181	AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240	Db	121	TGTCGGGGCTCACCCACAGCGCGCTCTCGCGCGTGGGCGCGGTCTGTCTCTCCCGG	180
Db	181	AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240	QY	181	AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240
QY	241	TCGAGACCCCGGAGGTCCCAACATCGTCTGATTCGGCTCGCTGTCGTTATGCCGCGG	300	Db	181	AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240
Db	241	TCGAGACCCCGGAGGTCCCAACATCGTCTGATTCGGCTCGCTGTCGTTATGCCGCGG	300	QY	241	TCGAGACCCCGGAGGTCCCAACATCGTCTGATTCGGCTCGCTGTCGTTATGCCGCGG	300
QY	301	TCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGTCAACG	360	Db	241	TCGAGACCCCGGAGGTCCCAACATCGTCTGATTCGGCTCGCTGTCGTTATGCCGCGG	300
Db	301	TCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGTCAACG	360	QY	301	TCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGTCAACG	360
QY	361	ACGAGATCCACTACCTGACCGCCGAGAGGAGGACCGCCACGTCGTCGGCGAGGCCAACT	420	Db	301	TCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGTCAACG	360
Db	361	ACGAGATCCACTACCTGACCGCCGAGAGGAGGACCGCCACGTCGTCGGCGAGGCCAACT	420	QY	361	ACGAGATCCACTACCTGACCGCCGAGAGGAGGACCGCCACGTCGTCGGCGAGGCCAACT	420
QY	421	CGCGGATTCGACGACAAGGGCGGTTTCGCGAGGCGCGGTCGTCGGCGAGGCCGCGG	480	Db	361	ACGAGATCCACTACCTGACCGCCGAGAGGAGGACCGCCACGTCGTCGGCGAGGCCAACT	420
Db	421	CGCGGATTCGACGACAAGGGCGGTTTCGCGAGGCGCGGTCGTCGGCGAGGCCGCGG	480	QY	421	CGCGGATTCGACGACAAGGGCGGTTTCGCGAGGCGCGGTCGTCGGCGAGGCCGCGG	480
QY	481	GCAGAGTTCGAGTACGTCGCTGTCGAGGTGGACTACATGACGTCGTCGGCGCGCCAGA	540	Db	421	CGCGGATTCGACGACAAGGGCGGTTTCGCGAGGCGCGGTCGTCGGCGAGGCCGCGG	480
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US-09-285-306-5							
; Sequence 5, Application US/09285306A							
; Publication No. US20020187467A1							
; GENERAL INFORMATION:							
; APPLICANT: Gingeras, Thomas							
; APPLICANT: Drenkow, Jorg							
; APPLICANT: Affymetrix, Inc.							
; TITLE OF INVENTION: Mycobacterial rpoB Sequences							
; FILE REFERENCE: 018547-018570US							
; CURRENT APPLICATION NUMBER: US/09/285,306A							
; CURRENT FILING DATE: 1999-04-02							
; EARLIER APPLICATION NUMBER: US 60/080,616							
; EARLIER FILING DATE: 1998-04-03							
; NUMBER OF SEQ ID NOS: 181							
; SOFTWARE: FastSeq for Windows Version 3.0							
; SEQ ID NO 5							
; LENGTH: 705							
; TYPE: DNA							
; ORGANISM: Mycobacterium avium							
US-09-285-306-5							
Query Match 100.0%; Score 705; DB 9; Length 705;							
Best Local Similarity 100.0%; Pred. No. 2.le-154;							
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	1	CCGAGAGCTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTCGGCGG	60	Db	1	CCGAGAGCTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTCGGCGG	60
Db	1	CCGAGAGCTGGAGCGGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTCGGCGG	60	QY	61	CGATCAAGGAGTTCCTCGGACACGACGTCGTCAGTTCATGACACCAACCCCGC	120
QY	61	CGATCAAGGAGTTCCTCGGACACGACGTCGTCAGTTCATGACACCAACCCCGC	120	Db	61	CGATCAAGGAGTTCCTCGGACACGACGTCGTCAGTTCATGACACCAACCCCGC	120
Db	61	CGATCAAGGAGTTCCTCGGACACGACGTCGTCAGTTCATGACACCAACCCCGC	120	QY	121	TGTCGGGGCTCACCCACAAGCGCGCTGTCGGCGCTGGGCGCGGTGCTGTCCCGG	180

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QY 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGCGCTGGCCCGGCTGCTGTCTCCGGG 180
Db 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGCGCTGGCCCGGCTGCTGTCTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCGCGACGTCGACCCCTCCCACTACGCGCGGATGTCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCGCGACGTCGACCCCTCCCACTACGCGCGGATGTCCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAAGGTTGTCACGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAAGGTTGTCACGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTGTGTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTGTGTCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCGAGGTCGACTACATGAGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCCCTCGTCGAGGTCGACTACATGAGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATCGAGCGCCAGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCCAGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
QY 661 TGGCACCGCATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGCACCGCATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 4
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: GINGERAS, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCGGCACCGACCGAGCTGTCCAGTTTCATGGACCAACAACCCGC 120

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Db 61 CGATCAAGGAGTCTTCGGCACCGACCGAGCTGTCCAGTTTCATGGACCAACAACCCGC 120
QY 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGCGCTGGCCCGGCTGCTGTCTCCGGG 180
Db 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGCGCTGGCCCGGCTGCTGTCTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCGCGACGTCGACCCCTCCCACTACGCGCGGATGTCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCGCGACGTCGACCCCTCCCACTACGCGCGGATGTCCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAAGGTTGTCACGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAAGGTTGTCACGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTGTGTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTGTGTCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCGAGGTCGACTACATGAGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCCCTCGTCGAGGTCGACTACATGAGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATCGAGCGCCAGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCCAGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
QY 661 TGGCACCGCATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGCACCGCATGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

RESULT 5
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: GINGERAS, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60

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QY 1 CCAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCTGGCGG 60  
 Db 1 CCAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTCGGACACAGCGAGCTGTCCAGTTCATGAGACCAACACCGG 120  
 Db 61 CGATCAAGGAGTCTTCGGACACAGCGAGCTGTCCAGTTCATGAGACCAACACCGG 120  
 QY 121 TGTGGGGCTCACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
 Db 121 TGTGGGGCTCACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
 QY 181 AGCGGCGCGGCTGGAGGTCGGGACGTGCAACCGTCCCACTACGGCGCGATGTGCCGA 240  
 Db 181 AGCGGCGCGGCTGGAGGTCGGGACGTGCAACCGTCCCACTACGGCGCGATGTGCCGA 240  
 QY 241 TGAGACCCCGGAGGTCGCAACATCGTCTGATCGGCTCGGTGTATGCGCGG 300  
 Db 241 TGAGACCCCGGAGGTCGCAACATCGTCTGATCGGCTCGGTGTATGCGCGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTGCGGCGGCAACT 420  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTGCGGCGGCAACT 420  
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTGTGCGGCGGCGCAACT 480  
 Db 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTGTGCGGCGGCGCAACT 480  
 QY 421 CGCGGATCGAGCAACAGGCGCGGTTTCGGGAGGCGCGGTTGCTGCTCCGCAAGGCGG 540  
 Db 421 CGCGGATCGAGCAACAGGCGCGGTTTCGGGAGGCGCGGTTGCTGCTCCGCAAGGCGG 540  
 QY 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGCGGTGCGCGCGCGG 600  
 Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGCGGTGCGCGCGCGG 600  
 QY 541 TGGTGTCCGTCGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGACCGTGGCC 660  
 Db 541 TGGTGTCCGTCGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGACCGTGGCC 660  
 QY 661 TGGCACCGGATGAGCTGCGCGCGCGATCGAGCGGCGACGT 705  
 Db 661 TGGCACCGGATGAGCTGCGCGCGCGATCGAGCGGCGACGT 705

RESULT 8  
 US-09-285-306-13  
 ; Sequence 13, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 13  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-13

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCTGGCGG 60  
 Db 1 CCAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCAGTCTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTCGGACACAGCGAGCTGTCCAGTTCATGAGACCAACACCGG 120  
 Db 61 CGATCAAGGAGTCTTCGGACACAGCGAGCTGTCCAGTTCATGAGACCAACACCGG 120  
 QY 121 TGTGGGGCTCACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
 Db 121 TGTGGGGCTCACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGTCTGTCCCGG 180  
 QY 181 AGCGGCGCGGCTGGAGGTCGGGACGTGCAACCGTCCCACTACGGCGCGATGTGCCGA 240  
 Db 181 AGCGGCGCGGCTGGAGGTCGGGACGTGCAACCGTCCCACTACGGCGCGATGTGCCGA 240  
 QY 241 TGAGACCCCGGAGGTCGCAACATCGTCTGATCGGCTCGGTGTATGCGCGG 300  
 Db 241 TGAGACCCCGGAGGTCGCAACATCGTCTGATCGGCTCGGTGTATGCGCGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTGCGGCGGCAACT 420  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGTGCGGCGGCAACT 420  
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTGTGCGGCGGCGCAACT 480  
 Db 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTGTGCGGCGGCGCAACT 480  
 QY 421 CGCGGATCGAGCAACAGGCGCGGTTTCGGGAGGCGCGGTTGCTGCTCCGCAAGGCGG 540  
 Db 421 CGCGGATCGAGCAACAGGCGCGGTTTCGGGAGGCGCGGTTGCTGCTCCGCAAGGCGG 540  
 QY 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGCGGTGCGCGCGCGG 600  
 Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGCGGTGCGCGCGCGG 600  
 QY 541 TGGTGTCCGTCGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGACCGTGGCC 660  
 Db 541 TGGTGTCCGTCGCGCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGACCGTGGCC 660  
 QY 661 TGGCACCGGATGAGCTGCGCGCGCGATCGAGCGGCGACGT 705  
 Db 661 TGGCACCGGATGAGCTGCGCGCGCGATCGAGCGGCGACGT 705

RESULT 9  
 US-09-285-306-14  
 ; Sequence 14, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 14  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-14

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i  ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGTGAGGCGGATCACACGCGAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGTGAGGCGGATCACACGCGAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTCGGCACCGAGCTGTCAGTTCATGACGAGAACACCCGC 120
Db 61 CGATCAAGAGTTCCTCGGCACCGAGCTGTCAGTTCATGACGAGAACACCCGC 120
QY 121 TGTGCGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGCTGTCCCGG 180
Db 121 TGTGCGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGCGAGTCCCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGAGTTCGCGAGTTCGCGAGTTCGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCGCGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCCGGG 300
Db 241 TCGAGACCCGCGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCCGGG 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGTTTCATCGAGACCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGAGGACCGCCACGTCGTCGCGAGGCGCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGAGAGGAGGACCGCCACGTCGTCGCGAGGCGCAACT 420
QY 421 CGCGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCAAGCGG 480
Db 421 CGCGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCAAGCGG 480
QY 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGGACGTGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGGACGTGCGCGCGCAGA 540
QY 541 TGTGTCGTCGTCGCGACCGCGATGATCCGTCCTCGAGAGCAGCAGCCACCGTCCC 600
Db 541 TGTGTCGTCGTCGCGACCGCGATGATCCGTCCTTCGAGACGACGACCGTCCC 600
QY 601 TGATGGCGCCAAATGACGCGCGGTCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 601 TGATGGCGCCAAATGACGCGCGGTCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
QY 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGGCGACGT 705

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; TYPE: DNA

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; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCCAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGGCACCCAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGTCCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGTCCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTCCGCTGCTGTTATGCGCGG 300
DB 241 TCGAGACCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTCCGCTGCTGTTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCGCGCGGAGGCGG 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCGCGCGGAGGCGG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCGCGCGGAGGCGG 420
DB 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCGCGCGGAGGCGG 420
QY 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTCGTCGCGCGG 480
DB 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTCGTCGCGCGG 480
QY 481 GCGAGGTCGAGTACGTCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGAGGCGG 540
DB 481 GCGAGGTCGAGTACGTCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGAGGCGG 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCCAACCGTGCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCCAACCGTGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCGGTCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGG 660
DB 601 TGATGGCGCCCAACATGACGCGCGGTCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGG 660
QY 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
DB 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705

```

## RESULT 12

```

US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181

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## RESULT 13

```

US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616

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; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

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Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCCAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGGCACCCAGCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGTCCCGACGTCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGTCCCGACGTCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTCCGCTGCTGTTATGCGCGG 300
DB 241 TCGAGACCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTCCGCTGCTGTTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCGCGCGGAGGCGG 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCGCGCGGAGGCGG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCGCGCGGAGGCGG 420
DB 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCGCGCGGAGGCGG 420
QY 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTCGTCGCGCGG 480
DB 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTCGTCGCGCGG 480
QY 481 GCGAGGTCGAGTACGTCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGAGGCGG 540
DB 481 GCGAGGTCGAGTACGTCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGAGGCGG 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCCAACCGTGCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCCAACCGTGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCGGTCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGG 660
DB 601 TGATGGCGCCCAACATGACGCGCGGTCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGG 660
QY 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
DB 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705

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Fri Aug 20 12:39:17 2004

```
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-01857005
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGCGG 60
Db 1 CCCAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGCGG 60
QY 61 CGATCAAGAGGATTTCTTCGGACACAGCCAGCAGTGTCCAGTTTCATGACGACAAACCCG 120
Db 61 CGATCAAGAGGATTTCTTCGGACACAGCCAGCAGTGTCCAGTTTCATGACGACAAACCCG 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGTGGCGCGTGGCGCGTGGTGTGTC 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGTGGCGCGTGGCGCGTGGTGTGTC 180
QY 181 AGCGGGCCGGGCTGGAGGTCCGGAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
Db 181 AGCGGGCCGGGCTGGAGGTCCGGAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
QY 241 TCAGAGACCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
Db 241 TCAGAGACCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGACGGCGTGTACCG 360
Db 301 TGAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTCTGACCCCGCAGAGGAGGACCGCACGTCGTGTGCGGAGGCGG 420
Db 361 ACAGATCCACTACTCTGACCCCGCAGAGGAGGACCGCACGTCGTGTGCGGAGGCGG 420
QY 421 CGCGGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGTCCTCGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGTCCTCGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCAGA 540
QY 541 TGGTGTGCGGTGCGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCAGCAGCAGCAG 600
Db 541 TGGTGTGCGGTGCGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCAGCAGCAGCAG 600
QY 601 TGATGGGCGCCAAACATGACGAGCGGTTCCGCTGGTGGCGCAGGCGCGCGCTGG 660
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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.8%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGCGG 60
Db 1 CCCAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGCGG 60
QY 61 CGATCAAGAGGATTTCTTCGGACACAGCCAGCAGTGTCCAGTTTCATGACGACAAACCCG 120
Db 61 CGATCAAGAGGATTTCTTCGGACACAGCCAGCAGTGTCCAGTTTCATGACGACAAACCCG 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGTGGCGCGTGGCGCGTGGTGTGTC 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGTGGCGCGTGGCGCGTGGTGTGTC 180
QY 181 AGCGGGCCGGGCTGGAGGTCCGGAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 240
Db 181 AGCGGGCCGGGCTGGAGGTCCGGAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 240
QY 241 TCAGAGACCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
Db 241 TCAGAGACCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGTACCGCAAGGTGTCTGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGTACCGCAAGGTGTCTGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTCTGACCCCGCAGAGGAGGACCGCACGTCGTGTGCGGAGGCGG 420
Db 361 ACAGATCCACTACTCTGACCCCGCAGAGGAGGACCGCACGTCGTGTGCGGAGGCGG 420
QY 421 CGCGGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGTCCTCGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGTCCTCGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCAGA 540
QY 541 TGGTGTGCGGTGCGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCAGCAGCAGCAG 600
Db 541 TGGTGTGCGGTGCGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCAGCAGCAGCAG 600
QY 601 TGATGGGCGCCAAACATGACGAGCGGTTCCGCTGGTGGCGCAGGCGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGACGAGCGGTTCCGCTGGTGGCGCAGGCGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGGCTGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCAACCGGATGAGGCTGCGCGCGGATCGACGCGCGGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
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Db 601 TGATGGGCGCAACATGACGCGGCGGCTTCGGCTGGTGGCGAGCGGCGCGCTGG 660  
Qy 661 TGGGCAACCGCATGGAGCTGGCGCGGCGGATCGACGCGGCGGAGCT 705  
Db 661 TGGGCAACCGCATGGAGCTGGCGCGGCGGATCGACGCGGCGGAGCT 705

RESULT 15  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 3.7e-151;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGCATCACCGGAGACCCCTGATCAACATCGTTCAGTCTGGGCGG 60  
Db 1 CCCAGGAGCTGGAGCGGATCACCGGAGACCCCTGATCAACATCGTTCAGTCTGGGCGG 60

Qy 61 CGATCAAGGAGTTCTTGGGACCAAGCCAGCTGTCCAGTTTCATGGACCAAGCAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTGGGACCAAGCCAGCTGTCCAGTTTCATGGACCAAGCAACCCGC 120

Qy 121 TGTGGGGCTCACCAACAGCGCGCTGTGGGGCTGGGGCTGGGGCTGGGGCTGGGGCTGGGG 180  
Db 121 TGTGGGGCTCACCAACAGCGCGCTGTGGGGCTGGGGCTGGGGCTGGGGCTGGGGCTGGGG 180

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGTCCCACTACCGGATGTCGGGATGTCGGGA 240  
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGTCCCACTACCGGATGTCGGGATGTCGGGA 240

Qy 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGTGCGGTGCTGTGCGGTGATGCGGGG 300  
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGTGCGGTGCTGTGCGGTGATGCGGGG 300

Qy 301 TCAACCGGTTGGGTTTCATCGAGCGCGGTACCGCAAGGTGGTCGACGGGCTGGTCAACG 360  
Db 301 TCAACCGGTTGGGTTTCATCGAGCGCGGTACCGCAAGGTGGTCGACGGGCTGGTCAACG 360

Qy 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCAGTGGTGGCGCGGCAACT 420  
Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCAGTGGTGGCGCGGCAACT 420

Qy 421 CGCGGATCGACGAAAGGGCCGGTTGCGGAGGCGCGGGTGGTGGTGGTGGTGGTGGTGGTGG 480  
Db 421 CGCGGATCGACGAAAGGGCCGGTTGCGGAGGCGCGGGTGGTGGTGGTGGTGGTGGTGGTGG 480

Qy 481 GCGAGGTCCAGTACGTGCGCTCGTCCAGTGGTACATGGAAGTGTGCGCGCGCAGA 540  
Db 481 GCGAGGTCCAGTACGTGCGCTCGTCCAGTGGTACATGGAAGTGTGCGCGCGCAGA 540

Qy 541 TGGTGTGGTGGCGACCGGATGATCCCGTTCTCGAGCACGACGACGACGACGACGACGACG 600  
Db 541 TGGTGTGGTGGCGACCGGATGATCCCGTTCTCGAGCACGACGACGACGACGACGACGACG 600

Qy 601 TGATGGGCGCAACATGACGCGGCGGCTTCGGCTGGTGGCGAGCGGCGCGCTGG 660  
Db 601 TGATGGGCGCAACATGACGCGGCGGCTTCGGCTGGTGGCGAGCGGCGCGCTGG 660  
Qy 661 TGGGCAACCGCATGGAGCTGGCGCGGCGGATCGACGCGGCGGAGCT 705  
Db 661 TGGGCAACCGCATGGAGCTGGCGCGGCGGATCGACGCGGCGGAGCT 705

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OM nucleic - nucleic search, using sw model

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Title: US-09-285-306-5

Perfect score: 705

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Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA.\*

- 1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq.\*
- 2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq.\*
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- 4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq.\*
- 5: /cgn2\_6/ptodata/2/ina/6C\_COMB.seq.\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-520-946-138
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-08-520-946-138
13	530.4	75.2	620	4	US-08-520-946-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
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22	528.8	75.0	620	4	US-08-520-946-140
23	528.8	75.0	620	4	US-08-520-946-140
24	528.8	75.0	620	4	US-08-520-946-140
25	528.8	75.0	620	4	US-08-520-946-140
26	528.8	75.0	620	4	US-08-520-946-140
27	528.8	75.0	620	4	US-08-520-946-140
28	528.8	75.0	620	4	US-08-520-946-140
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32	528.8	75.0	620	4	US-08-520-946-140
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41	528.8	75.0	620	4	US-08-520-946-140
42	528.8	75.0	620	4	US-08-520-946-140
43	528.8	75.0	620	4	US-08-520-946-140
44	528.8	75.0	620	4	US-08-520-946-140
45	528.8	75.0	620	4	US-08-520-946-140

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4093	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1037	Sequence 1037, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11335	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appli
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

## ALIGNMENTS

### RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

FILE REFERENCE: 24366-20007.00  
CURRENT APPLICATION NUMBER: US/09/103,840A  
CURRENT FILING DATE: 1998-06-24  
NUMBER OF SEQ ID NOS: 2  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 2  
LENGTH: 4403765  
TYPE: DNA  
ORGANISM: Mycobacterium tuberculosis  
FEATURE:  
OTHER INFORMATION: CDC 1551  
OTHER INFORMATION: "n" bases at various positions throughout the sequence  
OTHER INFORMATION: represent a, t, c or g  
US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;  
Best Local Similarity 91.4%; Pred. No. 3.9e-110; Indels 0; Gaps 0;  
Matches 639; Conservative 0; Mismatches 0

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCTCCAGTCTGTCGCGG 60  
DB 762963 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGCGGTGTCGCG 763022  
QY 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGACACGAGAACACCCGC 120  
DB 763023 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTTCATGACACGAGAACACCCGC 763082  
QY 121 TGTTCGGGCTCACCAAGCGCGCTGTCCGCGCTGGCGCTGGCGTGGTCTGTCTCCCGG 180  
DB 763083 TGTTCGGGCTCACCAAGCGCGCTGTCCGCGCTGGCGCTGGCGTGGTCTGTCTCCCGG 763142  
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
DB 763143 AGCGGCGCGGCTGGAGGTCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 763202  
QY 241 TCAGAGACCCCGGAGGTTCACCAACATCGGTCTGATCGGCTCGTGTGCGGTGTGTCGCGG 300  
DB 763203 TCAGAGACCCCGGAGGTTCACCAACATCGGTCTGATCGGCTCGTGTGCGGTGTGTCGCGG 763262  
QY 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCTTACCGAGGTCGCGAGGTCGCGGTGTGTCGCGG 360  
DB 763263 TCAACCGGTTCCGGGTTTCATCGAGACCGCTTACCGAGGTCGCGAGGTCGCGGTGTGTCGCGG 763322  
QY 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420  
DB 763323 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 763382  
QY 421 CGCGGATCGAGCAGAACGGGCGGTTTCGCGAGGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480  
DB 763383 CGCGGATCGAGCAGAACGGGCGGTTTCGCGAGGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 763442  
QY 481 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540  
DB 763443 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 763502  
QY 541 TGTGTCGCT 600  
DB 763503 TGTGTCGCT 763562  
QY 601 TGATGGGCGCCAAACATCGAGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660  
DB 763563 TCATGGGCGCCAAACATCGAGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 763622  
QY 661 TGGGACCGGATGGAGCTGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGG 699  
DB 763623 TGGGACCGGATGGAGCTGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGG 763661

RESULT 3  
US-09-103-840A-1  
Sequence 1, Application US/09103840A  
Patent No. 6294328  
GENERAL INFORMATION:

INFORMATION FOR SEQ ID NO: 24:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 706 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;  
Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;  
Matches 646; Conservative 0; Mismatches 59

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCTCCAGTCTGTCGCGG 60  
DB 2 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGCGGTGTCGCGG 61  
QY 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGACACGAGAACACCCGC 120  
DB 62 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTTCATGACACGAGAACACCCGC 121  
QY 121 TGTTCGGGCTCACCAAGCGCGCTGTCCGCGCTGGCGCTGGCGTGGTCTGTCTCCCGG 180  
DB 122 TGTTCGGGCTCACCAAGCGCGCTGTCCGCGCTGGCGCTGGCGTGGTCTGTCTCCAGTG 181  
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 240  
DB 182 AGCGGCGCGGCTGGAGGTCGCGAGTGCACCCGCTCCACTACGCGCGGATGTGCCGA 241  
QY 241 TCAGAGACCCCGGAGGTTCACCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTGCTGCTGCT 300  
DB 242 TCAGAGACCCCGGAGGTTCACCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTGCTGCTGCT 301  
QY 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCTTACCGAGGTCGCGAGGTCGCGGTGTGTCGCGG 360  
DB 302 TCAACCGGTTCCGGGTTTCATCGAGACCGCTTACCGAGGTCGCGAGGTCGCGGTGTGTCGCGG 361  
QY 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420  
DB 362 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 421  
QY 421 CGCGGATCGAGCAGAACGGGCGGTTTCGCGAGGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480  
DB 422 CGCGGATCGAGCAGAACGGGCGGTTTCGCGAGGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 481  
QY 481 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540  
DB 482 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 541  
QY 541 TGTGTCGCT 600  
DB 542 TGTGTCGCT 601  
QY 601 TGATGGGCGCCAAACATCGAGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660  
DB 602 TCATGGGCGCCAAACATCGAGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 705  
QY 661 TGGGACCGGATGGAGCTGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGG 706  
DB 662 TGGGACCGGATGGAGCTGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGG 706

RESULT 2  
US-09-103-840A-2  
Sequence 2, Application US/09103840A  
Patent No. 6294328  
GENERAL INFORMATION:  
APPLICANT: FLEISCHMAN, Robert D.  
APPLICANT: WHITE, Owen R.  
APPLICANT: FRASER, Claire M.  
APPLICANT: VENTER, John C.  
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TUBERCULOSIS

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGATCATACACCGACACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 761003 CCCAGGAGCTGGAGGATCATACACCGACACCCCTGATCAACATCCGTCGTGGCGG 761062

QY 61 CGATCAAGAGGTTCTTCGGCCACCGACGCTGTCCTCAGTTCTATGACACGACACCCGCG 120
Db 761063 CGATCAAGAGGTTCTTCGGCCACCGACGCTGATGCCAATTCATGACACGACACCCGCG 761122

QY 121 TGTGGGGCTCACCAAGCGCCGCTGTTCGGGCTGGGGCTGGGTGTCTGTCCCGGG 180
Db 761123 TGTGGGGCTTACCAAGCGCCGCTGTTCGGGCTGGGGCTGGGTGTCTGTCCCGGG 761182

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGCTGACCGTGCACCGTCCCACTAGCGCGGATGCCCCGA 240
Db 761183 AGCGTGGGGCTGGAGTTCGCGACGCTGACCGTGCACCGTCCCACTAGCGCGGATGCCCCGA 761242

QY 241 TCGAGACCCCGAGGCTGCCAATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCGGGG 300
Db 761243 TCGAAACCCCTGAGGGGCCCCAATCGGTCTGATCGGCTCGCTGTCTGCTGTATGCGGGG 761302

QY 301 TCACCCGCTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCACGGCGTGTACCG 360
Db 761303 TCACCCGCTTCGGGTTTCATCGAAACGCGGTACCGCAAGGTGGTGCACGGCGTGTACCG 761362

QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGACCGCAGCTGTGGCGCGAGCCCAACT 420
Db 761363 ACAGATCGGTGATCTGACCGCCGACGAGGAGACCGCAGCTGTGGCGCGAGCCCAATT 761422

QY 421 CGCGGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGGTGTGGTTCGCGCGAAGCGG 480
Db 761423 CGCGGATCGATCGGAGCGGTGCTGTCTGTGAGCGCGCGGTGTGGTTCGCGCGAAGCGG 761482

QY 481 GCAGGTTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGCTGTTCGCGCGCGCAGA 540
Db 761483 GCAGGTTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGCTGTTCGCGCGCGCAGA 761542

QY 541 TGGTTCGGTGGCCACCGCATGATCCCGTTCCTGAGACGACGACGCAACCGTGGCC 600
Db 761543 TGGTTCGGTGGCCACCGCATGATTCCTTCCTGAGACGACGACGCAACCGTGGCC 761602

QY 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGCGCGCGCTGG 660
Db 761603 TCATGGGGGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGCGCGCGCTGG 761662

QY 661 TGGGACCGGCATGGAGCTGCGCGCGCGCATCGACGCGG 699
Db 761663 TGGGACCGGCATGGAGCTGCGCGCGCGCATCGACGCGG 761701
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RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSER: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57
```

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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACCGCAGACCGTGTGATCAATATCCGTCGCGTGGTGGCGG 1183

QY 61 CGATCAAGAGGATTCCTTCGGCACCCAGCCAGCTGTCCCAGTTCATGAGACAGAACCCCGC 120
Db 1184 CTATCAAGAAATTCCTTCGGCACCCAGCCAGCTGTGCGAGTTCATGAGTACAGAACCCCTC 1243

QY 121 TGTTCGGGGCTCACCCCAAGCGCGGCTGTTCGGCGCTGGGCCCGGGGTGTCTGTTCGCGGG 180
Db 1244 TGTTCGGGGCTCACCCCAAGCGCGGCTGTTCGGCGCTGGGCCCGGGGTGTCTGTTCGCGGTG 1303

QY 181 AGCGGCGCGGGTGGAGGTCCGCGAGTGCACCCGTCGCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGGGTAGAGGTCCGTCGAGTCGACCCCTTCGCACATACGCGCGGATGTGCCGA 1363

QY 241 TCAGACCCCGGAGGTCCTCCAAATCGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGGG 300
Db 1364 TCAGACTCCGAGGGCCCGAAACATAGGTCTGATCGTTTCATTTGTTCGTTGTACCGCGGG 1423

QY 301 TCACCCGCTTCGGGTTCATCGAGACCGCTACCGAAAGTGTGTCAGCGGCGGTCAACCG 360
Db 1424 TCACCCGCTTCGGGTTCATCGAAACACCGTACCGCAAGTGTGAGCGGTGTGTTGTCAGCG 1483
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361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGCTGTGTGGCGAGGCCAACT 420  
1484 ACGAGATCGAATCTTGACCGCTGACGAGGAAGACCGCCCATGTCTGTGGCGAGGCCAACT 1543  
421 CGCCGATCGACGACGAGGCGCGGTTCGCGAGGCGCGGTGCTGTTCGCGCGCAAGGCGG 480  
1544 CGCCGATCGACGAGCGCGCGGTTCCTCGAGCGCGCGGTTCGCGAGGCGCGGTTCGCGCGCAAGGCGG 1603  
481 CGAGGTCGAGTACGTCGCTCGTCCGAGGTGGACTACATGAGACGCTGTTCGCGCGCCGACG 540  
1604 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGGACTACATGAGTACATGATGCTTCGCGCCGACG 1663  
541 TCGGTGTCGTCGCGCCGCGGATGATCCGCTTCCTCGAGCACGACGACGACGCGTGCCTG 600  
1664 TCGGTGTCGTCGCGCCGCGGATGATCCGCTTCCTCGAGCACGACGACGCGTGCCTG 1723  
601 TCGATGCGCCGACGATGACGCGCGCGGTCGCTGCGTTCGCGAGGCGCGCGCTGG 660  
1724 TCGATGCGCGCTAACATGACGCGCGCGGTCGCTGCGTTCGCGAGGCGCGCGCTGG 1783  
661 TCGGACCGCGCGCTAACATGACGCGCGCGGTCGCTGCGTTCGCGAGGCGCGCGCTGG 699  
1784 TCGGACCGCGCTAACATGACGCGCGCGGTCGCTGCGTTCGCGAGGCGCGCGCTGG 1822

RESULT 5  
US-09-082-614A-57  
; Sequence 57, Application US/09082614A  
; Patent No. 6124098  
; GENERAL INFORMATION:  
; APPLICANT: Heym, Beate  
; APPLICANT: Cole, Stewart  
; APPLICANT: Young, Douglas  
; APPLICANT: Zhang, Ying  
; APPLICANT: Honore, Nadine  
; APPLICANT: Telenti, Amalio  
; APPLICANT: Bodmer, Thomas  
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance  
; TITLE OF INVENTION: in Mycobacterium Tuberculosis  
; NUMBER OF SEQUENCES: 66  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
; ADDRESSEE: Dunner  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3315  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; FILING DATE:  
; APPLICATION NUMBER: US/09/082.614A  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/313,185  
; FILING DATE: 12-OCT-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 02356.0068-00000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4000  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ ID NO: 57:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3447 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single

TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-09-082-614A-57  
Query Match 79.2%; Score 558.2; DB 3; Length 3447;  
Best Local Similarity 87.4%; Pred. No. 1.7e-101;  
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;  
1 CCCAGGAGTGGAGGCGGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCGTCGGGG 60  
1124 CCCAGGAGTGGAGGCGGATCACACGCGAGACCCCTGATCAATATCCGTCGGTCGGCG 1183  
61 CGATCAAGAGGTTCTTCGCGACCCAGCCAGCTCTCCAGTTTCATGACACAGAACACCCGC 120  
1184 CTATCAAGAAATCTTCGCGACCCAGCCAGCTCTCCAGTTTCATGATCAGAACACCCCTC 1243  
121 TGTGCGGGGTACCCACAGACCGCGCTGTGCGCGCTGGCGCGGCTGTCTGTCTCCCGGG 180  
1244 TGTGCGGGGTACCCACAGACCGCGCTGTGCGCGCTGGCGCGGCTGTCTGTCTCCCGGG 1303  
181 ASCGGGCGGGGTGGAGGTCCGCGACGTCGACACCCCTGCCACTACGCGCGGATGTGCCGA 240  
1304 AGCTGCCGGGTAGAGTCCGTGACGTGACCCCTTCGCACTAGCGCGGATGTGCCGA 1363  
241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGTCTGTCTGTCTGT 300  
1364 TCGAGACTCCGGAGGGCGCCCAATAGTCTGATCGGTTTCATTCGCGTTACGCGCGGG 1423  
301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGTGTCGACGGCGTGTCAACCG 360  
1424 TCACCCCTTCGGGTTTCATCGAAACACCCGTACCGCAAGTGTGTCGAGTGTGTGTGTGT 1483  
361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCG 420  
1484 ACAGATCGAATCTTGACCGCTGACGAGGAGACCGCCATGTCGTGGCGCAGGCCAACT 1543  
421 CGCCGATCGACACAAAGGCGCGGTTCGCGAGGCGCGGTGTCGTCGCGCGCAAGGCGG 480  
1544 CGCCGATCGACGAGGCGCGGTTCCTCGAGCGCGCGGTTCGTCGCGCGCGCGCGCGG 1603  
481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGACACTACATGAGCTGTCTCGCGCGCGCG 540  
1604 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGATGATTCGCTTCGAGCAGCAGCAGCAG 1663  
541 TCGTGTCTGTCGCGCACCGCGGATGATCCGCTTCCTCGAGCAGCAGCAGCAGCAGCAG 600  
1664 TCGTGTCTGTCGCGCACCGCGGATGATTCGCTTCGAGCAGCAGCAGCAGCAGCAGC 1723  
601 TGATGGCGCCCAACATCGACGCGCGCGGTTCGCTGTCGCGAGGCGCGCGCTGG 660  
1724 TGATGGCGCGCTAACATCGACGCGCGCGGTTCGCTGTCGCGAGGCGCGCGCTGG 1783  
661 TGGCAGCGGATCGAGCTGCGCGCGCGGATCGACGCGG 699  
1784 TGGTACCGGTATGGAGTTGCGCGCGCGGATCGACGCTG 1822

RESULT 6  
US-08-250-030-1  
; Sequence 1, Application US/08250030  
; Patent No. 5643723  
; GENERAL INFORMATION:  
; APPLICANT: Persing, David H.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
; TITLE OF INVENTION: Clinical Specimens  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA



```

; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mueting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match          76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY      1 CCCAGGAGCTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGTCGGG 60
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     341 CCCAGGAGCTGGAGCGCATCACCGCAGAGCTTGATCAACATCCGCCGTGTGC CG 400
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY      61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCCAGTTTCATGGAACAGAACACCCGC 120
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     401 CGATCAAGAGTTCTTCGGCACCAGCAGCTGAGCCAATTTCATGGAACAGAACACCCGC 460
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     121 TGTCCGGGCTCACCACAAGCGCGCGCTGTCCGGCGCTGGGCCCGGTGGTCTGTCCCGG 180
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     461 TGTCCGGGTTGACCCACAAGCCCGCATGTTCGGCGCTGGGGCCCGCGGTCTGTACGTG 520
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     181 AGCGGGCGCGGCTGGAGGTTCGGACGTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     521 AGCGTGC CGGCTGGAGAGCGCGACGTGCACCGCTGCCTACGCGCGGATGTGCCCGA 580
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     241 TCAGAGACCCCGAGGTTCCCAACATCGTCTGATTCGCTCGCTGTGGTGTATSCGCGGG 300
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     581 TCGAAACCCCTGAGGGCCCCAAATCATCGTCTGATTCGCTCGCTGTCCGTGTACGCGCGG 640
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAGGTGTTGTCGAGCGGTGTCACCG 360
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     641 TCAACCGTTTCGGTTTCATCGAAACGCCGTACCGCAGGTGTCGAGCGCGTGTAGCG 700
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     361 ACAGATTCACTACTGTAACGCCGACGAGGAGACCGCACGTGTGGCGCAGGCCAACT 420
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     701 ACAGATTCGTGTACCTGTAACGCCGACGAGAGACCGCCACTGTTGTGGACAGGCCAATT 760
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     421 CGCCGATCGACGACAGGCGCGTTCGCGAGCGCCGGGTGCTGTTCCGCCGCAAGCGCG 480
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     761 CGCCGATCGATCGGACGCGTTCGTTTCGAGCGCGCGTGTGTTCCGCCGCAAGCGCG 820
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     481 GCAGGTTCGAGTACGTGCCCTCGTCGAGGTGAGCTACATGACAGTGTCCGCCGCCAGA 540
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     821 GCAGGTGAGTAGTACGTGCCCTCGTCTGAGGTGAGCTACATGACAGTCTCCGCCGCCAGA 880
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     541 TGGTGTCGTTGGCCACCGCGATGATCCCGTTCTCGAGCACGACGACGACACCGTGTCCC 600
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     881 TGTGTTCGTTGGCCACCGCGATGATTCCTTCTGGAGCACGACGACGACACCGTGTCCC 940
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     601 TGAATGGCGCCCAACATGACAGCGCCAGCGG 630
Db      | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY     941 TCATGGGGCAAACATGACAGCGCAGCGG 970

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## SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)

US-08-757-653-138

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 2; Length 620;  
 Mismatches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGGATTTCTTCGGACCAAGCCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGGTCGCGCGGATCAAGGATTTCTTCGGACCAAGCCAGCTGTCC 561
QY 96 CAGTTTCATGGACCAAGCAACCCGTCGCGGCTACCCCAAGCGCGCTGTGCGCG 155
Db 560 CAATTATGGACCAAGCAACCCGTCGCGGCTACCCCAAGCGCGCTGTGCGCG 501
QY 156 CTGGCGCGCGGTGTCTGTCTCCCGGAGCGCGCGCTGGAGTCCGCGACGTGACCGG 215
Db 500 CTGGCGCGCGGTGTCTGTCTCCCGGAGCGCGCGCTGGAGTCCGCGACGTGACCGG 441
QY 216 TCCCACTACGCGCGATGTGCCGATGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTGCCGATGAGACCCCGGAGGTCCCAACATCGTCTGATC 381
QY 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATGACGCGGTACCGG 335
Db 380 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATGACGCGGTACCGG 321
QY 336 AAGTGTGTGCGACGGCGGTGTGACGACGAGATCCACTACCTGACCGCGAGGAGGAC 395
Db 320 AAGTGTGTGCGACGGCGGTGTGACGACGAGATCCACTACCTGACCGCGAGGAGGAC 261
QY 396 CGCACGATGTGCGCGAGGCGCAATCGCGATGACGACCAAGGCGCGTTCGCGAGGCG 455
Db 260 CGCACGATGTGCGCGAGGCGCAATCGCGATGACGACCAAGGCGCGTTCGCGAGGCG 201
QY 456 CGGTGTGTGCGCGCGAGGCGCGGTGTGACGACGAGTGTGAGTGTGAGTGTGAGTGTG 515
Db 200 CGGTGTGTGCGCGCGAGGCGCGGTGTGACGACGAGTGTGAGTGTGAGTGTGAGTGTG 141
QY 516 TACATGACGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 575
Db 140 TACATGACGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 81
QY 576 GAGCAGACGACGCGCAACCGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 635
Db 80 GAGCAGACGACGCGCAACCGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 21
QY 636 CTGGTGTGCGCGAGGCGCG 655
Db 20 CTGGTGTGCGCGAGGCGCG 1

```

## RESULT 10

US-08-520-946-135

Sequence 135, Application US/08520946

Patent No. 6372424

## GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

APPLICANT: LYAMICHEV, VICTOR I.

APPLICANT: OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

NUMBER OF SEQUENCES: 160

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN &amp; CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/520,946

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 135:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-08-520-946-135

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Mismatches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGGATTTCTTCGGACCAAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGGATTTCTTCGGACCAAGCCAGCTGTCC 60
QY 96 CAGTTTCATGGACCAAGCAACCCGTCGCGGCTACCCCAAGCGCGCTGTGCGCG 155
Db 61 CAATTATGGACCAAGCAACCCGTCGCGGCTACCCCAAGCGCGCTGTGCGCG 120
QY 156 CTGGCGCGCGGTGTCTGTCTCCCGGAGCGCGCGCTGGAGTCCGCGACGTGACCGG 215
Db 121 CTGGCGCGCGGTGTCTGTCTCCCGGAGCGCGCGCTGGAGTCCGCGACGTGACCGG 180
QY 216 TCCCACTACGCGCGATGTGCCGATGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
Db 181 TCCCACTACGCGCGATGTGCCGATGAGACCCCGGAGGTCCCAACATCGTCTGATC 240
QY 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATGACGCGGTACCGG 335
Db 241 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATGACGCGGTACCGG 300
QY 336 AAGTGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCGGTGCG 395
Db 301 AAGTGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCGGTGCG 360
QY 396 CGCACGATGTGCGCGAGGCGCAATCGCGATGACGACCAAGGCGCGTTCGCGAGGCG 455
Db 361 CGCACGATGTGCGCGAGGCGCAATCGCGATGACGACCAAGGCGCGTTCGCGAGGCG 420
QY 456 CGGTGTGTGCGCGCGAGGCGCGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 515
Db 421 CGGTGTGTGCGCGCGAGGCGCGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 480
QY 516 TACATGACGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 575
Db 481 TACATGACGTGTGCGCGCGAGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 540
QY 576 GAGCAGACGACGCGCAACCGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 635
Db 541 GAGCAGACGACGCGCAACCGTGTGCGGTGCGCGAGTGTGCGGTGCGGTGCGGTGCG 600
QY 636 CTGGTGTGCGCGAGGCGCG 655

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Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/C

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGCATCAAGAGTTCTTCGGCACCGCAGCTGCC 95

Db 620 ATCAACATCCGCGGTGTCGCGCGCATCAAGAGTTCTTCGGCACCGCAGCTGAGC 561

Qy 96 CAGTTCTATGACCAACAACCCGCTGTCGGGGTCAACCAAGCGCGCTTCGGCG 155

Db 560 CAATTCTATGACCAACAACCCGCTGTCGGGGTTCACCAAGCGCGCTTCGGCG 501

Qy 156 CTGGCGCGCGGTGTCGTCTGTCCTCCGGGAGCGCGCGCTGGAGTCCGCGACCGC 215

Db 500 CTGGGGCGCGGTGTCGTACGTGAGCGTCCGCGGTGGAGTCCGCGACCGC 441

Qy 216 TCCCACTACGCGCGATGTCGCGATCGAGACCGCGGAGGTTCACATCGTCTGATC 275

Db 440 TCGCACTACGCGCGATGTCGCGATCGAAACCCCTGAGGGGCGCAACATCGTCTGATC 381

Qy 276 GGCTCGCTCGGTATGTCGCGGTCAACCGTTTCGCGTTTCATCGAGCGCGTACCGC 335

Db 380 GGCTCGCTCGGTATGTCGCGGTCAACCGTTTCGCGTTTCATCGAAACCGCTACCGC 321

Qy 336 AAGTGGTTCGAGCGCGTGTGTCACCGACGAGATCCACTACTGACCGCGACGAGGAGC 395

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Qy 456 CGGGTGTGTCGCGCGCGCAAGCGCGGCGAGTTCGAGTACGTCGCTCCGAGGTGAC 515

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Qy 516 TACATGAGCGTGTGCGCGCGCGCAGATGTGTGCGTGGCCACCGCGATGATCCGTTCC 575

Db 140 TACATGAGCGTGTGCGCGCGCGCAGATGTGTGCGTGGCCACCGCGATGATCCGTTCC 81

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Qy 636 CTGGTGGCGAGCGAGCGCC 655

Db 20 CTGGTCCGTAGCGAGCGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGCATCAAGAGTTCTTCGGCACCGCAGCTGCC 95

Db 1 ATCAACATCCGCGGTGTCGCGCGCATCAAGAGTTCTTCGGCACCGCAGCTGAGC 60

QY 96 CAGTTTCATGACAGCAACACCGCTGTTCGGGTCTACCCACAGCGCCGCTGTTCGGCG 155  
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QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGCGCGGTGAGGTTCGCGGACGTCGACCCG 215  
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QY 276 GGTCTGCTTCGCTGTATGCGCGGTCAACCCGTTTCGGGTTCATCGAGCGCGTACCCG 335  
Db 241 GGTCTGCTTCGCTGTACGCGGGTCAACCCGTTTCGGGTTCATCGAAACCGCGTACCCG 300  
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QY 636 CTGTTGCGCAGCGAGCGCC 655  
Db 601 CTGTTGCGCAGCGAGCGCC 620

## RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN &amp; CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: &lt;Unknown&gt;

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGTCCAGTCTGTGGCGGCGATCAAGAGATTCTTCGGCACCAAGCCAGCTGTCC 95  
Db 620 ATCAACATCGTCCAGTCTGTGGCGGCGATCAAGAGATTCTTCGGCACCAAGCCAGCTGTCC 561  
QY 96 CAGTTTCATGACAGCAACACCGCTGTTCGGGCTCACCCACAAAGCGCGCTGTTCGGCG 155  
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Db 260 CGCCAGTGTGTCGCGCAGCGCAACTTCGCCGATCGATGCGGACGCGTTCGTCGAGCGC 201  
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QY 576 GAGCACGACGCGCAACCGTCCCTGATGTCGCGCGCAACATGTCGAGCGCGAGCGGTTCG 635  
Db 80 GAGCACGACGCGCAACCGTCCCTGATGTCGCGCGCAACATGTCGAGCGCGAGCGGTTCG 21  
QY 636 CTGTTGCGCGAGCGAGCGCC 655  
Db 20 CTGTTGCGCGAGCGAGCGCC 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190



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QY      396 CGCCACGTGGTGGCGGACGGCCAACTGCCGATCGACGACAAGGGCCCGTTCCGGAGGCC 455
Db      361 CGCCACGTGGTGGCACAGGCCAATTCGCCGATCGATCGGACGGTCCGTCGAGCCG 420
QY      456 CGGTTGCTGTCGCGCGCAAGCGGGCGAGGTGAGTACGTGCTGTCGAGGTGGAC 515
Db      421 CGGTTGCTGTCGCGCGCAAGCGGGCGAGGTGAGTACGTGCTGTCGAGGTGGAC 480
QY      516 TACATGACGTGTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCCTC 575
Db      481 TACATGACGTCTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCCTG 540
QY      576 GAGCAGCAGCAGCCAAACCGTGGCCCTGATGGGCGCCAAACATGACGCGCGAGCGGTCCG 635
Db      541 GAGCAGCAGCAGCCAAACCGTGGCCCTCATGGGGGCAACATGACGCGCGAGCGGTGCCG 600
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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds  
(without alignments)  
8488.468 Million cell updates/sec

Title: US-09-285-306-5  
Perfect score: 705  
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Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0  
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Maximum Match 100%  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12
8	705	100.0	705	9	US-09-285-306-13
9	705	100.0	705	9	US-09-285-306-14
10	705	100.0	705	9	US-09-285-306-16
11	705	100.0	705	9	US-09-285-306-24
12	703.4	99.8	705	9	US-09-285-306-17
13	695	98.6	705	9	US-09-285-306-3
14	693.4	98.4	705	9	US-09-285-306-11

15 691 98.0 705 9 US-09-285-306-10 Sequence 10, Appl  
16 691 98.0 3444 13 US-10-282-122A-25737 Sequence 25737, A  
17 687 97.4 687 9 US-09-285-306-18 Sequence 18, Appl  
18 687 97.4 687 9 US-09-285-306-19 Sequence 19, Appl  
19 687 97.4 687 9 US-09-285-306-20 Sequence 20, Appl  
20 687 97.4 687 9 US-09-285-306-21 Sequence 21, Appl  
21 687 97.4 687 9 US-09-285-306-22 Sequence 22, Appl  
22 687 97.4 687 9 US-09-285-306-23 Sequence 23, Appl  
23 687 97.4 687 9 US-09-285-306-25 Sequence 25, Appl  
24 687 97.4 687 9 US-09-285-306-27 Sequence 27, Appl  
25 660.2 93.6 705 9 US-09-285-306-143 Sequence 143, App  
26 658.6 93.4 705 9 US-09-285-306-144 Sequence 144, App  
27 655.4 93.0 705 9 US-09-285-306-87 Sequence 87, Appl  
28 655.4 93.0 705 9 US-09-285-306-88 Sequence 88, Appl  
29 655.4 93.0 705 9 US-09-285-306-90 Sequence 90, Appl  
30 655.4 93.0 705 9 US-09-285-306-92 Sequence 92, Appl  
31 655.4 93.0 705 9 US-09-285-306-96 Sequence 96, Appl  
32 653.8 92.7 705 9 US-09-285-306-86 Sequence 86, Appl  
33 653.8 92.7 705 9 US-09-285-306-89 Sequence 89, Appl  
34 653.8 92.7 705 9 US-09-285-306-91 Sequence 91, Appl  
35 653.8 92.7 705 9 US-09-285-306-93 Sequence 93, Appl  
36 653.8 92.7 705 9 US-09-285-306-94 Sequence 94, Appl  
37 652.2 92.5 705 9 US-09-285-306-95 Sequence 95, Appl  
38 652.2 92.5 705 9 US-09-285-306-85 Sequence 85, Appl  
39 652.2 92.5 705 9 US-09-285-306-89 Sequence 89, Appl  
40 652.2 92.5 705 9 US-09-285-306-181 Sequence 181, App  
41 642.2 91.1 687 9 US-09-285-306-146 Sequence 146, App  
42 642.2 91.1 687 9 US-09-285-306-148 Sequence 148, App  
43 637.4 90.4 687 9 US-09-285-306-100 Sequence 100, App  
44 635.8 90.2 687 9 US-09-285-306-99 Sequence 99, Appl  
45 635.8 90.2 687 9 US-09-285-306-145 Sequence 145, App

## ALIGNMENTS

RESULT 1  
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; Sequence 4, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 CCAGAGCGTGGAGCGATCACACCGCAGACCGCTGATCAACATCCCTCAGTCGTCGCGG 60  
QY 61 CGATCAAGAGTTCTTCGGACACAGCCAGCTGTCCAGTTTCATGGACCAAGAACACCGC 120  
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RESULT 2
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; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
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181 AGCGGCGGGCTGAGGTCCGACGTGACCCCGTCCACTACGGCCGGATGTGCCCGA 240
181 AGCGGCGGGCTGAGGTCCGACGTGACCCCGTCCACTACGGCCGGATGTGCCCGA 240
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCCGTCTCGGTGATGCGCGG 300
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCCGTCTCGGTGATGCGCGG 300
301 TCAACCCGTTCCGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGTCAACG 360
301 TCAACCCGTTCCGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGTCAACG 360
361 ACGAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAACT 420
361 ACGAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAACT 420
421 CGCCGATCGACACAAAGGCGCGGTTCCGCGAGCGCGGTCGTGGTCCCGCAAGCGG 480
421 CGCCGATCGACACAAAGGCGCGGTTCCGCGAGCGCGGTCGTGGTCCCGCAAGCGG 480
481 GCGAGTCCAGTACGTGCGCTCGTCCGAGTGGACTACATGACGTGTGCGCGCGCAGA 540
481 GCGAGTCCAGTACGTGCGCTCGTCCGAGTGGACTACATGACGTGTGCGCGCGCAGA 540
541 TGGTGTGCGTGGCCACCGCGATATCCCGTTCCTCGAGCACGACGACGCAACCGTGCCC 600
541 TGGTGTGCGTGGCCACCGCGATATCCCGTTCCTCGAGCACGACGACGCAACCGTGCCC 600
601 TGATGGCGCCAAACATCGACGCGCGGTCGTGGTGGCGAGGCGCGGTCG 660
601 TGATGGCGCCAAACATCGACGCGCGGTCGTGGTGGCGAGGCGCGGTCG 660
661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 3
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGACGTGGAGGGATCACACCGCAGACCGCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGGGATCACACCGCAGACCGCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCGAACAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCGAACAACCCGC 120
QY 121 TGTCCGGGTTCACCCACAAGCGCGCTGTCGGCGCTGGGCCCGGCTGTCTGCCCGG 180
```

QY 121 TGTGGGGCTCACCACAAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180  
Db 121 TGTGGGGCTCACCACAAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180  
QY 181 AGCGGGCGGGCTGAGAGTCCGACAGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240  
Db 181 AGCGGGCGGGCTGAGAGTCCGACAGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240  
QY 241 TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGTGCCCGG 300  
Db 241 TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGTGCCCGG 300  
QY 301 TCAACCCGTTGGGTTTCATCGAGACCCGCTACCGCAAGGTGGTGCAGCGGCTGTACCG 360  
Db 301 TCAACCCGTTGGGTTTCATCGAGACCCGCTACCGCAAGGTGGTGCAGCGGCTGTACCG 360  
QY 361 ACGAGATCCACTACCTGACCGCGGAGAGAGACCGGCAAGTGGTGGCGCAGGCCAACT 420  
Db 361 ACGAGATCCACTACCTGACCGCGGAGAGAGACCGGCAAGTGGTGGCGCAGGCCAACT 420  
QY 421 CGCCGATCGACCAAGGCGCGTTTCGCGGAGGCGCGGCTGTGCTCCCGCGCAAGCG 480  
Db 421 CGCCGATCGACCAAGGCGCGTTTCGCGGAGGCGCGGCTGTGCTCCCGCGCAAGCG 480  
QY 481 GCGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGACGTGTCCCGCGCAGA 540  
Db 481 GCGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGACGTGTCCCGCGCAGA 540  
QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACG 600  
Db 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACG 600  
QY 601 TGATGGGCGCAACATGACGAGCGGCGGCTTCGCTGCGAGACGACGACGACGACGACG 660  
Db 601 TGATGGGCGCAACATGACGAGCGGCGGCTTCGCTGCGAGACGACGACGACGACGACG 660  
QY 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGACGCGCGACGT 705  
Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 4  
US-09-285-306-7  
; Sequence 7, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1999-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 7  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2,1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60  
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60  
QY 61 CGATCAAGAGTTCTTCGGGACACGACCGAGTGTCCAGTTTCATGGACCAACACCGC 120

Db 61 CGATCAAGAGTTCTTCGGCACACGAGCTGTCCAGTTTCATGGACCAACACCGC 120  
QY 121 TGTGGGGCTCACCACAAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180  
Db 121 TGTGGGGCTCACCACAAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180  
QY 181 AGCGGGCGGGCTGAGAGTCCGACAGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240  
Db 181 AGCGGGCGGGCTGAGAGTCCGACAGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240  
QY 241 TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGTGCCCGG 300  
Db 241 TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGTGCCCGG 300  
QY 301 TCAACCCGTTGGGTTTCATCGAGACCCGCTACCGCAAGGTGGTGCAGCGGCTGTACCG 360  
Db 301 TCAACCCGTTGGGTTTCATCGAGACCCGCTACCGCAAGGTGGTGCAGCGGCTGTACCG 360  
QY 361 ACGAGATCCACTACCTGACCGCGGAGAGAGACCGGCAAGTGGTGGCGCAGGCCAACT 420  
Db 361 ACGAGATCCACTACCTGACCGCGGAGAGAGACCGGCAAGTGGTGGCGCAGGCCAACT 420  
QY 421 CGCCGATCGACCAAGGCGCGTTTCGCGGAGGCGCGGCTGTGCTCCCGCGCAAGCG 480  
Db 421 CGCCGATCGACCAAGGCGCGTTTCGCGGAGGCGCGGCTGTGCTCCCGCGCAAGCG 480  
QY 481 GCGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGACGTGTCCCGCGCAGA 540  
Db 481 GCGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGACGTGTCCCGCGCAGA 540  
QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACG 600  
Db 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACG 600  
QY 601 TGATGGGCGCAACATGACGAGCGGCGGCTTCGCTGCGAGACGACGACGACGACGACG 660  
Db 601 TGATGGGCGCAACATGACGAGCGGCGGCTTCGCTGCGAGACGACGACGACGACGACG 660  
QY 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGACGCGCGACGT 705  
Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 5  
US-09-285-306-8  
; Sequence 8, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1999-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 8  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2,1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60  
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60

QY	61	CGATCAAGAGTTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACACAGAACAAACCCGC	120
Db	61	CGATCAAGAGTTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACACAGAACAAACCCGC	120
QY	121	TGTTCGGGGCTCACCAACAGCCCGCTGTTCGGCGCTGGCCCGGGTGTCTGTCCCGGG	180
Db	121	TGTTCGGGGCTCACCAACAGCCCGCTGTTCGGCGCTGGCCCGGGTGTCTGTCCCGGG	180
QY	181	AGCGGGCCGGCTGAGGTCGGGACGTTCGGGACCGCTCCCACTACGCGGATGTGCCCGA	240
Db	181	AGCGGGCCGGCTGAGGTCGGGACGTTCGGGACCGCTCCCACTACGCGGATGTGCCCGA	240
QY	241	TCGAGACCCCGGAGGTCCCAATCGTCTGATCGGCTCGTGTTCGGTGTATGCGCGGG	300
Db	241	TCGAGACCCCGGAGGTCCCAATCGTCTGATCGGCTCGTGTTCGGTGTATGCGCGGG	300
QY	301	TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGGGTTGTCACCG	360
Db	301	TCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGGGTTGTCACCG	360
QY	361	ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT	420
QY	421	CGCGGATCGACGACAAAGGCGCGTTCGGGAGGCGCGGTGTGCTGGTTCGGCGGCGG	480
Db	421	CGCGGATCGACGACAAAGGCGCGTTCGGGAGGCGCGGTGTGCTGGTTCGGCGGCGG	480
QY	481	GCAGGTTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGAGCGTGTCCGCGGCGG	540
Db	481	GCAGGTTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGAGCGTGTCCGCGGCGG	540
QY	541	TGTTGTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCC	600
Db	541	TGTTGTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCC	600
QY	601	TGATGGCGCCCAACATGACGCGCGGCTTCGGCTGGTTCGCGAGCGCGCGCTGG	660
Db	601	TGATGGCGCCCAACATGACGCGCGGCTTCGGCTGGTTCGCGAGCGCGCGCTGG	660
QY	661	TGGCACCGGATGAGTTCGCGCGGCGATCGACGCGGCGACGT	705
Db	661	TGGCACCGGATGAGTTCGCGCGGCGATCGACGCGGCGACGT	705

RESULT 6  
US-09-285-306-9  
; Sequence 9, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 9  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGGGATCACACCGGACCTGATCAACATCCGTCAGTCCGTCGTCGGCGG 60

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCG 60  
 DB |||||  
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCG 60  
 DB |||||  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAACCCCG 120  
 DB |||||  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAACCCCG 120  
 DB |||||  
 QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGGCTGGGCCCGGGTGTCTGTCCGGG 180  
 DB |||||  
 QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGGCTGGGCCCGGGTGTCTGTCCGGG 180  
 DB |||||  
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 DB |||||  
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 DB |||||  
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGTGTATGCCGCG 300  
 DB |||||  
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGTGTATGCCGCG 300  
 DB |||||  
 QY 301 TCAACCCGCTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGTGTATGCCGCG 360  
 DB |||||  
 QY 301 TCAACCCGCTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGTGTATGCCGCG 360  
 DB |||||  
 QY 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGCTGTGTGTGTGTGTGTGTGTGT 420  
 DB |||||  
 QY 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGCTGTGTGTGTGTGTGTGTGTGT 420  
 DB |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGCGCGGTTTCGGGAGCGCGGTTTCGGGAG 480  
 DB |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGCGCGGTTTCGGGAGCGCGGTTTCGGGAG 480  
 DB |||||  
 QY 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGTGTGTGTGTGTGT 540  
 DB |||||  
 QY 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGTGTGTGTGTGT 540  
 DB |||||  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
 DB |||||  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
 DB |||||  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB |||||  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB |||||  
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGGCGATCGAGCGGCGGCGAGCT 705  
 DB |||||  
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGGCGATCGAGCGGCGGCGAGCT 705  
 DB |||||

## RESULT 8

US-09-285-306-13  
 ; Sequence 13, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingers, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 13  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-13

Query Match

100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCG 60  
 DB |||||  
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCG 60  
 DB |||||  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAACCCCG 120  
 DB |||||  
 QY 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAACCCCG 120  
 DB |||||  
 QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGGCTGGGCCCGGGTGTCTGTCCGGG 180  
 DB |||||  
 QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGGGCTGGGCCCGGGTGTCTGTCCGGG 180  
 DB |||||  
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 DB |||||  
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCGA 240  
 DB |||||  
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGTGTATGCCGCG 300  
 DB |||||  
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCTGTGTATGCCGCG 300  
 DB |||||  
 QY 301 TCAACCCGCTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGTGTATGCCGCG 360  
 DB |||||  
 QY 301 TCAACCCGCTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGTCTGTGTATGCCGCG 360  
 DB |||||  
 QY 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGCTGTGTGTGTGTGTGTGTGTGT 420  
 DB |||||  
 QY 361 ACGAGATCCACTTACCTGACCGCGGAGGAGCGCCACGCTGTGTGTGTGTGTGTGTGTGT 420  
 DB |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGCGCGGTTTCGGGAGCGCGGTTTCGGGAG 480  
 DB |||||  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGCGCGGTTTCGGGAGCGCGGTTTCGGGAG 480  
 DB |||||  
 QY 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGTGTGTGTGTGTGT 540  
 DB |||||  
 QY 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGTGTGTGTGTGT 540  
 DB |||||  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
 DB |||||  
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
 DB |||||  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB |||||  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB |||||  
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGGCGATCGAGCGGCGGCGAGCT 705  
 DB |||||  
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGGCGATCGAGCGGCGGCGAGCT 705  
 DB |||||

## RESULT 9

US-09-285-306-14  
 ; Sequence 14, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingers, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 14  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-14

Fri Aug 20 12:39:18 2004

us-09-285-306-5.rnpb

i		ORGANISM: Mycobacterium avium	
US-09-285-306-16			
Query Match		100.0%; Score 705; DB 9; Length 705;	
Best Local Similarity		100.0%; Pred. No. 2.1e-154;	
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY	1	CCAGGAGTGGAGCGGATCACACCGAGACCTGATCAACATCCGTCAGTCGTGGCGG	60
Db	1	CCAGGAGTGGAGCGGATCACACCGAGACCTGATCAACATCCGTCAGTCGTGGCGG	60
QY	61	CGATCAAGAGTTCCTGGACACAGCCAGCTGTCCAGTTTCATGGACCAACACCCGC	120
Db	61	CGATCAAGAGTTCCTGGACACAGCCAGCTGTCCAGTTTCATGGACCAACACCCGC	120
QY	121	TGTTCGGGGCTACCCACAAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTCCCGGG	180
Db	121	TGTTCGGGGCTACCCACAAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTCCCGGG	180
QY	181	AGCGGCGCGGTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA	240
Db	181	AGCGGCGCGGTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA	240
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGCTCGCTCGTGTATGCGCGG	300
Db	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGCTCGCTCGTGTATGCGCGG	300
QY	301	TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA	360
Db	301	TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA	360
QY	361	ACGAGATCCACTACCTGACCGCGACGAGGAGACCCGACGTCGTGGCGGAGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGACGAGGAGACCCGACGTCGTGGCGGAGCCAACT	420
QY	421	CGCGGATCGACGCAAGGGCGGTTCCGCGAGCGCCGGTCTGGTCCCGCAAGCGG	480
Db	421	CGCGGATCGACGCAAGGGCGGTTCCGCGAGCGCCGGTCTGGTCCCGCAAGCGG	480
QY	481	GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGCGTGTGCGCGGCCA	540
Db	481	GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGCGTGTGCGCGGCCA	540
QY	541	TGTTGTCGTGGCGCACCGCGATGATCCGTTCTTCGAGGACGACGACCGCGGCC	600
Db	541	TGTTGTCGTGGCGCACCGCGATGATCCGTTCTTCGAGGACGACGACCGCGGCC	600
QY	601	TGATGGGCGCAACATGACGCGCGGTCGTGGTGGCGAGCGAGCGCGCTGG	660
Db	601	TGATGGGCGCAACATGACGCGCGGTCGTGGTGGCGAGCGAGCGCGCTGG	660
QY	661	TGGGACCCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT	705
Db	661	TGGGACCCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT	705
RESULT 11			
US-09-285-306-24			
Sequence 24, Application US/09285306A			
Publication No. US20020187467A1			
GENERAL INFORMATION:			
APPLICANT: Gingers, Thomas			
APPLICANT: Drenkow, Jorg			
APPLICANT: Affymetrix, Inc.			
TITLE OF INVENTION: Mycobacterial rpoB Sequences			
FILE REFERENCE: 018547-018570US			
CURRENT APPLICATION NUMBER: US/09/285,306A			
CURRENT FILING DATE: 1999-04-02			
EARLIER APPLICATION NUMBER: US 60/080,616			
EARLIER FILING DATE: 1998-04-03			
NUMBER OF SEQ ID NOS: 181			
SOFTWARE: FastSeq for Windows Version 3.0			
SEQ ID NO 24			
TYPE: DNA			

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; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCCTCCAGTCTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCCTCCAGTCTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGCACACAGCCAGCTGCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACACAGCCAGCTGCCAGTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGTCAACCCACAAGCCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTGGGGTCAACCCACAAGCCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGGCGGGTGGAGTCCGCGAGTGCACCCGCTCCCACTACCGCCGATGTGCCCGA 240
Db 181 AGCGGGCGGGTGGAGTCCGCGAGTGCACCCGCTCCCACTACCGCCGATGTGCCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGTTATGCGCGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGTTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
QY 361 ACAGATCCACTACTACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACGACAAAGGCGGTTTCGGAGGCGCGGTGGTTCGCGCGAGGCCAACT 480
Db 421 CGCGCATCGACGACAAAGGCGGTTTCGGAGGCGCGGTGGTTCGCGCGAGGCCAACT 480
QY 481 GCGAGGTTCAGTACGTCCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTTCAGTACGTCCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
QY 601 TGATGGCGCCAAATGACGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGACGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCCTCCAGTCTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCCTCCAGTCTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGCACACAGCCAGCTGCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACACAGCCAGCTGCCAGTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGTCAACCCACAAGCCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTGGGGTCAACCCACAAGCCCGCTGTCCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGGCGGGTGGAGTCCGCGAGTGCACCCGCTCCCACTACCGCCGATGTGCCCGA 240
Db 181 AGCGGGCGGGTGGAGTCCGCGAGTGCACCCGCTCCCACTACCGCCGATGTGCCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGTTATGCGCGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGATGCGGTGTTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
QY 361 ACAGATCCACTACTACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACGACAAAGGCGGTTTCGGAGGCGCGGTGGTTCGCGCGAGGCCAACT 480
Db 421 CGCGCATCGACGACAAAGGCGGTTTCGGAGGCGCGGTGGTTCGCGCGAGGCCAACT 480
QY 481 GCGAGGTTCAGTACGTCCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTTCAGTACGTCCTTCGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
QY 601 TGATGGCGCCAAATGACGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGACGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
```



Publication No. US20020187467A1  
GENERAL INFORMATION:  
APPLICANT: Gingeras, Thomas  
APPLICANT: Drenkow, Jorg  
APPLICANT: Affymetrix, Inc.  
TITLE OF INVENTION: Mycobacterial rpoB Sequences  
FILE REFERENCE: 018547-018570US  
CURRENT APPLICATION NUMBER: US/09/285,306A  
CURRENT FILING DATE: 1999-04-02  
EARLIER APPLICATION NUMBER: US 60/080,616  
EARLIER FILING DATE: 1998-04-03  
NUMBER OF SEQ ID NOS: 181  
SOFTWARE: FastSEQ for Windows Version 3.0  
SEQ ID NO 11  
LENGTH: 705  
TYPE: DNA  
ORGANISM: Mycobacterium avium  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (42)...(42)  
OTHER INFORMATION: n = g,a,c or t  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (692)...(692)  
OTHER INFORMATION: n = g,a,c or t  
US-09-285-306-11

Query Match 98.4%; Score 693.4; DB 9; Length 705;  
Best Local Similarity 98.9%; Pred. No. 1e-151;  
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACNTCCGTCGTCGTGGCGG 60  
QY 61 CGATCAAGAGGATTTCTTCGGCACCGACCGAGTCGCCAGTTCATCGGACCAACAACCGC 120  
Db 61 CGATCAAGAGGATTTCTTCGGCACCGACCGAGTCGCCAGTTCATCGGACCAACAACCGC 120  
QY 121 TGTGCGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGGTCTGTCTGTCGCGG 180  
Db 121 TGTGCGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGGTCTGTCTGTCGCGG 180  
QY 181 AGCGGGCGGGCTCGAGGTCGCGGACGTGACCCCGTCCCACTACGCGCGGATGTCGCGA 240  
Db 181 AGCGGGCGGGCTCGAGGTCGCGGACGTGACCCCGTCCCACTACGCGCGGATGTCGCGA 240  
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
QY 301 TCAACCGGTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCCGACGGCGTGTACCG 360  
Db 301 TGAACCGGTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCCGACGGCGTGTACCG 360  
QY 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCAACT 420  
Db 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCAACT 420  
QY 421 CGCGCATCGACGAACAAGGGCGGGTTCCGCGAGGCGCGGGTCTGTCGCGCAGGCGG 480  
Db 421 CGCGCATCGACGAACAAGGGCGGGTTCCGCGAGGCGCGGGTCTGTCGCGCAGGCGG 480  
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGGTGGTTCGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGGTGGTTCGCGCGCGCAGA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGACGACGACGAC 600  
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGACGACGACGAC 600  
QY 601 TGATGGGCGCAACATGACGCGCGGCGGTTCGCTGTCGACGAGCGGCGGCTGG 660

EARLIER FILING DATE: 1998-04-03  
NUMBER OF SEQ ID NOS: 181  
SOFTWARE: FastSEQ for Windows Version 3.0  
SEQ ID NO 3  
LENGTH: 705  
TYPE: DNA  
ORGANISM: Mycobacterium avium  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (525)...(525)  
OTHER INFORMATION: n = g,a,c or t  
FEATURE:  
NAME/KEY: modified\_base  
LOCATION: (650)...(650)  
OTHER INFORMATION: n = g,a,c or t  
US-09-285-306-3

Query Match 98.6%; Score 695; DB 9; Length 705;  
Best Local Similarity 98.8%; Pred. No. 4.3e-152;  
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGTCGTGGCGG 60  
QY 61 CGATCAAGAGGATTTCTTCGGCACCGACCGAGTCGCCAGTTCATCGGACCAACAACCGC 120  
Db 61 CGATCAAGAGGATTTCTTCGGCACCGACCGAGTCGCCAGTTCATCGGACCAACAACCGC 120  
QY 121 TGTGCGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGGTCTGTCTGTCGCGG 180  
Db 121 TGTGCGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGGTGGTCTGTCTGTCGCGG 180  
QY 181 AGCGGGCGGGCTCGAGGTCGCGGACGTGACCCCGTCCCACTACGCGCGGATGTCGCGA 240  
Db 181 AGCGGGCGGGCTCGAGGTCGCGGACGTGACCCCGTCCCACTACGCGCGGATGTCGCGA 240  
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCGCTGTCGTCGTCGTCGTCG 300  
QY 301 TCAACCGGTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCCGACGGCGTGTACCG 360  
Db 301 TCAACCGGTCGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCCGACGGCGTGTACCG 360  
QY 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCAACT 420  
Db 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGCAGGCAACT 420  
QY 421 CGCGCATCGACGAACAAGGGCGGGTTCCGCGAGGCGCGGGTCTGTCGCGCAGGCGG 480  
Db 421 CGCGCATCGACGAACAAGGGCGGGTTCCGCGAGGCGCGGGTCTGTCGCGCAGGCGG 480  
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGGTGGTTCGCGCGCGCAGA 540  
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGAGGTGGTTCGCGCGCGCAGA 540  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGACGACGACGAC 600  
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGACGACGACGAC 600  
QY 601 TGATGGGCGCAACATGACGCGCGGCGGTTCGCTGTCGACGAGCGGCGGCTGG 660  
Db 601 TGATGGGCGCAACATGACGCGCGGCGGTTCGCTGTCGACGAGCGGCGGCTGG 660  
QY 661 TGGGACCGGATGAGCTGCGCGCGCGGATCGACGCGCGGACGT 705  
Db 661 TGGGACCGGATGAGCTGCGCGCGGCGGATCGACGCGCGGACGT 705

RESULT 14  
US-09-285-306-11  
; Sequence 11, Application US/09285306A



Db 601 TGATGGGCGCCCAACATGACAGCCAGCGGCTTCGGCTGGTGGCAGCGAGCGCGCGCTGG 660  
 QY 661 TGGGCAACCGGCGATGGAGCTGGCGCGCGGCGATGACAGCGCGCGACGT 705  
 Db 661 TGGGCAACCGGCGATGGAGCTGGCGCGCGGCGATGACAGCGCGCGACGT 705  
 RESULT 15  
 US-09-285-306-10  
 ; Sequence 10, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial ipob Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 10  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 3.7e-151;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGGATACACCGGACCGGAGCCCTGATCAACATCGGTCCAGTGTGGCGG 60  
 Db 1 CCCAGGACGTGGAGCGGATACACCGGAGCCCTGATCAACATCGGTCCAGTGTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTCGGGACCGGAGCTGTCCAGTTCATGGACCGAGAACACCGCG 120  
 Db 61 CGATCAAGGAGTCTTCGGGACCGGAGCTGTCCAGTTCATGGACCGAGAACACCGCG 120  
 QY 121 TGTGGGGCTCACCCAGGCGGCGCTGTGGGCGCTGGGCGCGGCTGTGTTCGCGG 180  
 Db 121 TGTGGGGCTGTACCCAGGCGGCGCTGTGGGCGCTGGGCGCGGCTGTGTTCGCGG 180  
 QY 181 AGCGGGCGGCGCTGGAGTCCGAGCTGCGAGCTGACCGCTCCAGTTCATGGACCGAGAACACCGCG 240  
 Db 181 AGCGGGCGGCGCTGGAGTCCGAGCTGCGAGCTGACCGCTCCAGTTCATGGACCGAGAACACCGCG 240  
 QY 241 TCAGAGCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGCGG 300  
 Db 241 TCAGAGCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGCGG 300  
 QY 301 TCAACCGGTCGGGTTTCATCGAGCGGCTGACCGGCTGACCGAGGTGGTTCGAGCGGCTGTACCG 360  
 Db 301 TCAACCGGTCGGGTTTCATCGAGCGGCTGACCGGCTGACCGAGGTGGTTCGAGCGGCTGTACCG 360  
 QY 361 ACAGATCCACTACCTGACCGCGGACGAGGAGCGGCGGCTGTGGTTCGCGCGGCGCAACT 420  
 Db 361 ACAGATCCACTACCTGACCGCGGACGAGGAGCGGCGGCTGTGGTTCGCGCGGCGCAACT 420  
 QY 421 CGCCGATCGAGCGAAGGGCGGTTTCGCGGAGCGGCGGCTGTGGTTCGCGCGGCGAAGCGG 480  
 Db 421 CGCCGATCGAGCGAAGGGCGGTTTCGCGGAGCGGCGGCTGTGGTTCGCGCGGCGAAGCGG 480  
 QY 481 GCGAGGTGAGTACGTGCGCTTCGAGGTGAGTACATGAGCGTGTGCGCGCGCGAGA 540  
 Db 481 GCGAGGTGAGTACGTGCGCTTCGAGGTGAGTACATGAGCGTGTGCGCGCGCGAGA 540  
 QY 541 TGGTGTGGTGGCGGCGGATGATCCCGTTCCTCGAGCGGCGGCGGCGGCGGCGGCGG 600  
 Db 541 TGGTGTGGTGGCGGCGGATGATCCCGTTCCTCGAGCGGCGGCGGCGGCGGCGGCGGCGG 600

QY 601 TGATGGGCGCCCAACATGACAGCCAGCGGCTTCGGCTGGTGGCAGCGAGCGCGCGCTGG 660  
 Db 601 TGATGGGCGCCCAACATGACAGCCAGCGGCTTCGGCTGGTGGCAGCGAGCGCGCGCTGG 660  
 QY 661 TGGGCAACCGGCGATGGAGCTGGCGCGCGGCGATGACAGCGCGCGACGT 705  
 Db 661 TGGGCAACCGGCGATGGAGCTGGCGCGCGGCGATGACAGCGCGCGACGT 705

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 Job time : 408.972 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-6

Perfect score: 705

Sequence: 1 cccagacgtgagcgatcc.....ggcgatcgacggcgagcgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 2: /cgn2\_6/ptodata/2/ina/5B COMB.seq.\*
- 3: /cgn2\_6/ptodata/2/ina/6A COMB.seq.\*
- 4: /cgn2\_6/ptodata/2/ina/6B COMB.seq.\*
- 5: /cgn2\_6/ptodata/2/ina/PCJUS COMB.seq.\*
- 6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-757-653-135
11	530.4	75.2	620	4	US-08-520-946-135
12	530.4	75.2	620	4	US-08-520-946-138
13	530.4	75.2	620	4	US-09-655-378A-135
14	528.8	75.0	620	4	US-09-655-378A-138
15	528.8	75.0	620	2	US-08-757-653-136
16	528.8	75.0	620	2	US-08-757-653-137
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18	528.8	75.0	620	4	US-08-757-653-140
19	528.8	75.0	620	4	US-08-520-946-136
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21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-08-520-946-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
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					Sequence 24, Appl
					Sequence 2, Appl
					Sequence 1, Appl
					Sequence 57, Appl
					Sequence 57, Appl
					Sequence 1, Appl
					Sequence 135, Appl
					Sequence 138, Appl
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					Sequence 135, Appl
					Sequence 136, Appl
					Sequence 137, Appl
					Sequence 139, Appl
					Sequence 136, Appl
					Sequence 140, Appl
					Sequence 137, Appl
					Sequence 139, Appl
					Sequence 140, Appl
					Sequence 25, Appl
					Sequence 4737, Ap

## RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gigeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Striver, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

## ALIGNMENTS

Sequence 4771, Ap  
Sequence 22, Appl  
Sequence 30, Appl  
Sequence 59, Appl  
Sequence 59, Appl  
Sequence 36, Appl  
Sequence 36, Appl  
Sequence 1097, Ap  
Sequence 3177, Ap  
Sequence 20, Appl  
Sequence 35, Appl  
Sequence 35, Appl  
Sequence 401, Appl  
Sequence 111, Appl  
Sequence 1, Appl  
Sequence 1, Appl  
Sequence 4006, Ap  
Sequence 34, Appl

28 371.2 52.7 4032 4 US-09-252-991A-4771  
29 337.2 47.8 4083 4 US-09-489-039A-22  
30 337.2 47.8 4206 4 US-09-489-039A-30  
31 293.4 41.6 432 2 US-08-313-185-59  
32 293.4 41.6 432 3 US-09-082-614A-59  
33 286.2 40.6 324 4 US-08-750-088A-36  
34 286.2 40.6 324 4 US-09-540-236-1097  
35 265.2 37.6 2964 4 US-09-543-681A-3177  
36 265.2 37.6 4167 4 US-09-543-681A-3177  
37 265.2 37.6 31063 4 US-09-596-002-20  
38 255.6 36.3 319 4 US-08-750-088A-35  
39 255.6 36.3 319 4 US-09-722-319-35  
40 249.8 35.4 11935 4 US-09-634-238-401  
41 244.4 34.7 14672 4 US-08-961-527-111  
42 244.4 34.7 1830121 4 US-09-557-884-1  
43 244.4 34.7 1830121 4 US-09-643-990A-1  
44 241.2 34.2 4143 4 US-09-328-352-4006  
45 226.4 32.1 329 4 US-08-750-088A-34

Fri Aug 20 12:39:18 2004

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; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103.840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
;
US-09-103-840A-2

Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 3.9e-110; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

QY 1 CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 762963 CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 763022
QY 61 CGATCAAGAGGTTCTTCGSCACACGACGCTGCCAGTTCATGGACCAACAACCCGC 120
Db 763023 CGATCAAGAGGTTCTTCGSCACACGACGCTGCCAGTTCATGGACCAACAACCCGC 763082
QY 121 TGTTCGGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 763083 TGTTCGGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 763142
QY 181 AGCGGCGCGGGTTCGAGGTCGCGACGCTGACCCGTCCTACCTACGCGCGGATGCCCCGA 240
Db 763143 AGCGGCGCGGGTTCGAGGTCGCGACGCTGACCCGTCCTACCTACGCGCGGATGCCCCGA 763202
QY 241 TCAGACACCCGAGAGGTCCCAACATCGGTTCGATCGGCTCGCTGCTGATCGCGCGG 300
Db 763203 TCAGACACCCGAGAGGTCCCAACATCGGTTCGATCGGCTCGCTGCTGATCGCGCGG 763262
QY 301 TCACACCGTTTCGGGTTTCATCGACAGCGCGTACCGCAAGGTGGTTCGACGCGGTGTACCG 360
Db 763263 TCACACCGTTTCGGGTTTCATCGACAGCGCGTACCGCAAGGTGGTTCGACGCGGTGTACCG 763322
QY 361 ACAGATATCCACTACTGACCGCGGACGAGGAGACCGCCACGTCGTCGCGCGGCAACT 420
Db 763323 ACAGATATCCACTACTGACCGCGGACGAGGAGACCGCCACGTCGTCGCGCGGCAACT 763382
QY 421 CGCGGATCGACGACAGGCGCGGTTCGCGGAGGCGCGGTCGTCGCGCGGCAAGCGG 480
Db 763383 CGCGGATCGATGCGGACGCGGTTCGTCGAGCGCGCGGTCGTCGCGCGGCAAGCGG 763442
QY 481 GCGAGGTCGATGAGTGCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGCGAGA 540
Db 763443 GCGAGGTCGATGAGTGCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGCGAGA 763502
QY 541 TGGTGTTCGTCGCGGACCGCGGATGATGTCGTCGAGCAGCAGCAGCCACCGTGC 600
Db 763503 TGGTGTTCGTCGCGGACCGCGGATGATGTCGTCGAGCAGCAGCAGCCACCGTGC 763562
QY 601 TCATGGGCGGCAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGGCTGG 660
Db 763563 TCATGGGCGGCAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGGCTGG 763622
QY 661 TGGGACCGCGGATGAGTGCCTTCGTCGAGGTCGCGGCGGATGACGCGG 699
Db 763623 TGGGACCGCGGATGAGTGCCTTCGTCGAGGTCGCGGCGGATGACGCGG 763661

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```

```

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match      86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;
Matches 646; Conservative 0; Mismatches 59;

QY 1 CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 2 CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 61
QY 61 CGATCAAGAGGTTCTTCGSCACACGACGCTGCCAGTTCATGGACCAACAACCCGC 120
Db 62 CGATCAAGAGGTTCTTCGSCACACGACGCTGCCAGTTCATGGACCAACAACCCGC 121
QY 121 TGTTCGGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 122 TGTTCGGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 181
QY 181 AGCGGCGCGGGTTCGAGGTCGCGACGCTGACCCGTCCTACCTACGCGCGGATGCCCCGA 240
Db 182 AGCGGCGCGGGTTCGAGGTCGCGACGCTGACCCGTCCTACCTACGCGCGGATGCCCCGA 241
QY 241 TCAGACACCCGAGAGGTCCCAACATCGGTTCGATCGGCTCGCTGCTGATCGCGCGG 300
Db 242 TCAGACACCCGAGAGGTCCCAACATCGGTTCGATCGGCTCGCTGCTGATCGCGCGG 301
QY 301 TCACACCGTTTCGGGTTTCATCGACAGCGCGTACCGCAAGGTGGTTCGACGCGGTGTACCG 360
Db 302 TCACACCGTTTCGGGTTTCATCGACAGCGCGTACCGCAAGGTGGTTCGACGCGGTGTACCG 361
QY 361 ACAGATATCCACTACTGACCGCGGACGAGGAGACCGCCACGTCGTCGCGCGGCAACT 420
Db 362 ACAGATATCCACTACTGACCGCGGACGAGGAGACCGCCACGTCGTCGCGCGGCAACT 421
QY 421 CGCGGATCGACGACAGGCGCGGTTCGCGGAGGCGCGGTCGTCGCGCGGCAAGCGG 480
Db 422 CGCGGATCGATGCGGACGCGGTTCGTCGAGCGCGCGGTCGTCGCGCGGCAAGCGG 481
QY 481 GCGAGGTCGATGAGTGCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGCGAGA 540
Db 482 GCGAGGTCGATGAGTGCCTTCGTCGAGGTCGACTACATGACGTCGTCGCGCGGCGAGA 541
QY 541 TGGTGTTCGTCGCGGACCGCGGATGATGTCGTCGAGCAGCAGCAGCCACCGTGC 600
Db 542 TGGTGTTCGTCGCGGACCGCGGATGATGTCGTCGAGCAGCAGCAGCCACCGTGC 601
QY 601 TGGTGTTCGTCGCGGACCGCGGATGATGTCGTCGAGCAGCAGCAGCCACCGTGC 660
Db 602 TCATGGGCGGCAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGGCTGG 661
QY 661 TGGGACCGCGGATGAGTGCCTTCGTCGAGGTCGCGGCGGATGACGCGG 705
Db 662 TGGGACCGCGGATGAGTGCCTTCGTCGAGGTCGCGGCGGATGACGCGG 706

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TUBERCULOSIS

```



361 ACAGATCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGCGAGGCCAACT 420  
1484 ACGAGATCGATACCTGACCGCTGACGAGGAGACCGCCATGTCGTGGCGAGGCCAACT 1543  
421 CGCCGATCGACGACGAGCGCGGTTCGGGAGGCGCGGTGTCGTGGCGGACGAGGCCG 480  
1544 CGCCGATCGACGAGCGCGCGGTTCGTGGGAGGCGCGGTGTCGTGGCGGACGAGGCCG 1603  
481 GCGAGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
1604 GCGAGTCGAGTACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1663  
541 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 600  
1664 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 1723  
601 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 660  
1724 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 1783  
661 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 699  
1784 TCGTGTGCGTGGCCACGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAG 1822

RESULT 5  
US-09-082-614A-57  
; Sequence 57, Application US/09082614A  
; Patent No. 6124098  
; GENERAL INFORMATION:  
; APPLICANT: Heym, Beate  
; APPLICANT: Cole, Stewart  
; APPLICANT: Young, Douglas  
; APPLICANT: Zhang, Ying  
; APPLICANT: Honore, Nadine  
; APPLICANT: Bodmer, Thomas  
; APPLICANT: Telenti, Amalio  
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance  
; TITLE OF INVENTION: in Mycobacterium Tuberculosis  
; NUMBER OF SEQUENCES: 56  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3315  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/082,614A  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/313,185  
; FILING DATE: 12-OCT-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 02356.0068-00000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4000  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ ID NO: 57:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3447 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single

TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-09-082-614A-57  
Query Match 79.2%; Score 558.2; DB 3; Length 3447;  
Best Local Similarity 87.4%; Pred. No. 1.7e-101; Indels 0; Gaps 0;  
Matches 611; Conservative  
1 CCCAGGAGTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTCGTCGGCG 60  
1124 CCCAGAGCTCGAGCGGATCAGCCGCGAGACCTGATCAATATCGCTCGGTGGTCGCG 1183  
61 CGATCAAGAGTTCCTCGGCACACGACGCTGTCAGTTCATGACACAGAACACCCCG 120  
1184 CTATCAAGAAATTCCTCGGCACACGACGCTGTCAGTTCATGATCAAGAACACCCCTC 1243  
121 TGTGCGGGGTCAACACAGAGCGCGCTGTCGCGCGTGGCGCGGTGCTGTCGTCGCGG 180  
1244 TGTGCGGGCTGACCCCAAGCGCGGCTGTCGCGCGTGGCGCGGTGCTGTCGCGGTG 1303  
181 AGCGGCGCGGCTGAGAGTCCGCGACGTCGACCCCGTCCCACTACGCGCGGATGTGCCGA 240  
1304 AGCGTCCCGGCTAGAGGTCGTCGACGTCGACCCCTTCGCACTACGCGCGGATGTGCCGA 1363  
241 TCGAGACCGCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGTCGTCGTCGCGG 300  
1364 TCGAGACTCCGAGGCGCGGCAATAGTCTGATCGGTTCAATGTCGCTGTCGCGCGG 1423  
301 TCACCGGTCGCGGTTTCATCGAGACCGCGTACCGCAAGTGGTCGACGCGGTGTCAACCG 360  
1424 TCACCGGCTTCGCGGTTTCATCGAAACACCGTACCGCAAGTGGTCGACGCGGTGTCAACCG 1483  
361 ACCAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTCGTCGTCGTCGTCG 420  
1484 ACCAGATCGATATCTGACCGCTGACGAGGAGACCGCCATGTCGTCGTCGTCGTCGTCG 1543  
421 CGCCGATCGACGACAGGCGCGGTTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCG 480  
1544 CGCCGATCGACGAGCGCGGCTTCCTCGAGCGCGCGGTCGTCGTCGTCGTCGTCGTCG 1603  
481 GCGAGTCGATGAGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 540  
1604 GCGAGTGGAGTACGTGGCTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1663  
541 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 600  
1664 TGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1723  
601 TGATGGCGCCCAACATGACGCGCGAGGCGGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660  
1724 TGATGGCGCGCTAACATGACGCGCGAGCGGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1783  
661 TGGGACCGCGCATGAGCTGCGCGCGCGATCGACGCGG 699  
1784 TGGGTACCGGTATGAGTTGCGCGCGGCATCGACGCTG 1822

RESULT 6  
US-08-250-030-1  
; Sequence 1, Application US/08250030  
; Patent No. 5643723  
; GENERAL INFORMATION:  
; APPLICANT: Persing, David H.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
; TITLE OF INVENTION: Clinical Specimens  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA

Matches	574;	Conservative	0;	Mismatches	56;	Indels	0;	Gaps	0;
QY	1	CCCAGGACGTGGAGCGGATCACCGGACAGCCCTGATCAACATCCGTCCAGTTCGTGCGG	60						
Db	341	CCCAGGACGTGGAGCGGATCACCGGACAGCGTTGATCAACATCCGCCGCGTGTGCGCG	400						
QY	61	CGATCAAGAGGATTCCTTCGGACACAGCAGCTGTCCCAAGTTCATGGACACGAAACAACCCG	120						
Db	401	CGATCAAGGAGTCTTTCGGACACAGCCAGCTGAGCCAATTCATGGACACGAAACAACCCG	460						
QY	121	TGTCGGGGCTCACCCAAGCGCGCTGTGCGCGCTGGGCCCGCGGTGGTCTGTCCCGGG	180						
Db	461	TGTCGGGGTTGACCCAAGCGCGCATGTGCGCGCTGGGCCCGCGGTCTGTCACTG	520						
QY	181	AGCGGGCCGGCTCGGAGTCCGCGAGCTGCACCGCTCCCACTACGGCCGGATGTGCCGA	240						
Db	521	AGCGTCCCGGCTGAGAGAGCGGAGTGTCACCGCTGCACACTACGGCCGGATGTGCCGA	580						
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGGCTGTGATCGGCTCGGCTGCGGTATGCGGGG	300						
Db	581	TCGAAACCCCTGAGGGGGCCCAACATCGGCTGTGATCGGCTCGGCTGACGGCGCGG	640						
QY	301	TCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCAGCGCGTGGTCA	360						
Db	641	TCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGCAAGGTGGTTCAGCGCGTGGTAC	700						
QY	361	ACGAGATCCACTACCTGACCGCGCAGCAGGAGGACCGCCACGTGTGGCGAGGCCA	420						
Db	701	ACGAGATCGTGTACCTGACCGCTCAGCAGAGGACCGCCACGTGTGGCGACAGGCCA	760						
QY	421	CSCCGATCGACGACAAAGGCCCGGTTGCGGAGGCCCGGGTCTGGTCCGCCCAAGGGCG	480						
Db	761	CGCCCATCGATCGGACGGTCTGCTCGTACGCCCGCGTGTGGTCTCGCCGCAAGGGCG	820						
QY	481	GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACGTGTGCGCGGCCAGA	540						
Db	821	GCGAGTGGAGTACGTGCCCTCGTGTAGTGGACTACATGACGTCTCGCCCGGCCAGA	880						
QY	541	TGGTTCGGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCACCGCAACGTGCC	600						
Db	881	TGGTTCGGTGGCCACCGCATGATTCCTTCCTGAGCAGCAGCCCAACCGTGGCC	940						
QY	601	TGATGGCGCCAAACATGACGCCCAAGCGG	630						
Db	941	TCATGGGGCAACATGACGCCCAAGCGG	970						

Db	701	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCACGTGCTGGCACGAGGCCAATT	760
QY	421	CGCCGATCGACGACAAGGGCCGGTTCCGGAGGGCCCGGGTGTGTGTCGCCGCGCAAGGCGG	480
Db	761	CGCCGATCGATCGCGACCGGTGCTTCTGTCGAGCCGCGGTGCTGTGTCGCCGCGCAAGGCGG	820
QY	481	GCAGAGTCGAGTAGTGCGCCCTCGTCCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540
Db	821	GCAGAGTGGAGTACGTGCGCCCTCGTCTGAGGTGGACTACATGACGTGTGCGCGCCCGCAGA	880
QY	541	TGGTGTGCGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACACGACGCAACCGGTGCC	600
Db	881	TGGTGTGCGGTGGCCACCGCGATGATTCCTTCTGGAGCACGACGACGCAACCGGTGCC	940
QY	601	TGATGGGCGCCAAACATGACGCGCCGAGGCGG	630
	941	TCATGGCGGCGCAACATGACGCGCCGAGGCGG	970

## RESULT 8

```

US-08-757-653-135
; Sequence 135, Application US/08/757653
; Patent No. 584369
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W. I.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0

QY 36 ATCAACATCCGTCCAGTCGTGGCGGGGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGGTCGCGGGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGTCC 60
QY 96 CAGTTTATGGACACAGAACACCGCTGCGGGGCTCACCCACAAGCGCGCGCTGTGCGGGG 155
Db 61 CAATTTATGGACACAGAACACCGCTGTGCGGGTTCACCCACAAGCGCGCGCTGTGCGGG 120

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156	QY	CTGGCCCGGCTGGTCTGCTCCGCGACGCGCGCGGCTGGAGGTCCGCGACGTGCACCCG	215
121	Db	CTGGGGCCCGCGGCTGTGTACGTGACGTGCGGGCTGGAGGTCCGCGACGTGCACCCG	180
216	QY	TCCCACTACGCGCGGATGTGCCGATCGAGACCCGCGAGGTCCTCAACATCGTCTGATC	275
181	Db	TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCAAACATCGTCTGATC	240
276	QY	GGCTCGTGTGCGTGTATGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGACCCGCTACCGC	335
241	Db	GGCTCGTGTGCGTGTACGCGGGTTCACCCGTTTCGGGTTTCATCGAAACCCGCTACCGC	300
336	QY	AAGGTGGTCGACGGCGTGGTCACCGACGAGATCCACTACCTGAACGCCGACGAGGAGAC	395
301	Db	AAGGTGGTCGACGGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC	360
396	QY	CGCACGTGTGGCGCAGGCCCACTCGCCGATCGACGACAAAGGGCCGCTTCGCGAGGCC	455
361	Db	CGCCACGTGGTGGCACAGGCCCAATTCGCCCGATCGATCGGACGGTCGTCGTCAGCCG	420
456	QY	CGGGTCTGGTCCGCGCGCAAGCGGGCGAGGTCGAGTACGTGTCCTCGTCCGAGGTGCAC	515
421	Db	CGCGTCTGGTCCGCGCGCAAGCGGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC	480
516	QY	TACATGACGTGTCCCGCGCCAGATGTTGTCGGTGGCCACCGCATGATCCCGTTCCTTC	575
481	Db	TACATGACGTGTCCCGCGCCAGATGTTGTCGGTGGCCACCGCATGATTCCTTCCTCG	540
576	QY	GAGCAGCAGCGACCAACCGTCCCTGTATGGCGCCAAACATGACGCCGACGGCGTTTCGG	635
541	Db	GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAACATGACGCCGACGGCGTTCGG	600
636	QY	CTGGTGGCAGCGAGCGGCC	655
601	nb	CTGGTCCGTAGGAGGCCCC	620

## RESULT 9

US-08-757-653-138/C  
Sequence 138, Application US/08757653  
Patent No. 5943669  
GENERAL INFORMATION:  
APPLICANT: Kaiser, Michael W.  
APPLICANT: Lyamichev, Victor I.  
APPLICANT: Lyamichev, Natasha  
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
NUMBER OF SEQUENCES: 190  
CORRESPONDENCE ADDRESS:  
ADDRESS: Medlen & Carroll, LLP  
STREET: 220 Montgomery Street, Suite 2200  
CITY: San Francisco  
STATE: California  
COUNTRY: United States Of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/757,653  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: FORS-02565  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 138:



SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCAGTGTGGCGGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db 620 ATCAACATCCGTCAGTGTGGCGGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
QY 96 CAGTTTCATGACACAGAACCCGCTGTCGGGCTCACCACAAAGCGCCCTGTGGCG 155
Db 560 CAATTTCATGACACAGAACCCGCTGTCGGGCTTACCCACAAAGCGCCGCTGTGGCG 501
QY 156 CTGGGCGCGGCTGTCTGTCCGGGAGCGGCGGCTGGAGTTCGGCGACCGTGCACCCG 215
Db 500 CTGGGCGCGGCGGCTGTCTGTCCGGGAGCGGCGGCTGGAGTTCGGCGACCGTGCACCCG 441
QY 216 TCCCACTAGCGCGGATGTGCCGATCGAGACCCCGGAGGTCACCAATCGGTCTGATC 275
Db 440 TCGCACTAGCGCGGATGTGCCGATCGAGACCCCGGAGGTCACCAATCGGTCTGATC 381
QY 276 GGCTCGCTGTGGTGTATGCGCGGCTCAACCGTTTCGGGTTTCATCGAGCGCGTACCGC 335
Db 380 GGCTCGCTGTGGTGTATGCGCGGCTCAACCGTTTCGGGTTTCATCGAGCGCGTACCGC 321
QY 336 AAGTGTGTGACCGGCTGTGTCACCGAGATGCCACTACCTGACCGCGAGGCGGTCGCGAGGCC 455
Db 320 AAGTGTGTGACCGGCTGTGTCACCGAGATGCCACTACCTGACCGCGAGGCGGTCGCGAGGCC 261
QY 396 CGCCACGTGTGGCGGAGGCGCAATCTGCCGATCGACGAGATCGTGACCGCGAGGAGGAC 455
Db 260 CGCCACGTGTGGCGGAGGCGCAATCTGCCGATCGATGCGGAGGCGGTCGTCGAGCGCG 201
QY 456 CGGTGTGTGTGTCGCGCGGAGGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 515
Db 200 CGGTGTGTGTGTCGCGCGGAGGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 141
QY 516 TACATGACGTGTGCGCGCGGATGTGCGGTGCGGCGGATGTGCGGCGGATGTGCGGCGGAT 575
Db 140 TACATGACGTGTGCGCGCGGATGTGCGGTGCGGCGGATGTGCGGCGGATGTGCGGCGGAT 81
QY 576 GAGCAGACGACGCGGATGTGCGGCGGATGTGCGGCGGATGTGCGGCGGATGTGCGGCGGAT 635
Db 80 GAGCAGACGACGCGGATGTGCGGCGGATGTGCGGCGGATGTGCGGCGGATGTGCGGCGGAT 21
QY 636 CTGGTGTGCGGAGGCGGCC 655
Db 20 CTGGTGTGCGGAGGCGGCC 1

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## RESULT 10

US-08-520-946-135  
 Sequence 135, Application US/08520946  
 Patent No. 6372424

## GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.  
 APPLICANT: LYAMICHEV, VICTOR I.  
 APPLICANT: OLIVE, DAVID M.  
 TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
 TITLE OF INVENTION: PATHOGENS  
 NUMBER OF SEQUENCES: 160  
 CORRESPONDENCE ADDRESS:  
 ADDRESS: MEDLEN & CARROLL  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/520,946  
 FILING DATE:  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: CARROLL, PETER G.  
 REGISTRATION NUMBER: 32,837  
 REFERENCE/DOCKET NUMBER: FORS-01756  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 135:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCAGTGTGGCGGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db 1 ATCAACATCCGTCAGTGTGGCGGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 60
QY 96 CAGTTTCATGACACAGAACCCGCTGTCGGGCTCACCACAAAGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACAGAACCCGCTGTCGGGCTTACCCACAAAGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGCTGTCTGTCCGGGAGCGGCGGCTGGAGTTCGGGAGCTGCAGCCG 215
Db 121 CTGGGCGCGGCTGTCTGTCCGGGAGCGGCGGCTGGAGTTCGGGAGCTGCAGCCG 180
QY 216 TCCCACTAGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
Db 181 TCGCACTAGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGGTGTATGCGCGGCTCAACCGTTTCGGGTTTCATCGAGCGCGTACCGC 335
Db 241 GGCTCGCTGTGGTGTATGCGCGGCTCAACCGTTTCGGGTTTCATCGAGACCGCTACCGC 300
QY 336 AAGTGTGTGACCGCGTGTGTCACCGAGATCCACTACCTGACCGCGGAGGAGAC 395
Db 301 AAGTGTGTGACCGCGTGTGTCACCGAGATCCACTACCTGACCGCGGAGGAGAC 360
QY 396 CGCCACGTGTGGCGGAGGCGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGGGAGGCC 455
Db 361 CGCCACGTGTGGCGGAGGCGCAACTCGCGGATCGAGCAAGGCGCGGTTTCGGGAGGCC 420
QY 456 CGGTGTGTGTCGCGCGGAGGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 515
Db 421 CGGTGTGTGTCGCGCGGAGGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 480
QY 516 TACATGACGTGTGCGCGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 575
Db 481 TACATGACGTGTGCGCGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 540
QY 576 GAGCAGACGACGCGCAACCGTCCCTGTGAGGCGGCAACATCGAGCGCGGAGGTCG 635
Db 541 GAGCAGACGACGCGCAACCGTCCCTGTGAGGCGGCAACATCGAGCGCGGAGGTCG 600
QY 636 CTGGTGTGCGGAGGCGGCC 655

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Db 601 CTGCTCCGTAGCAGAGGCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

APPLICANT: LYAMICHEV, VICTOR I.

APPLICANT: OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

TITLE OF INVENTION: PATHOGENS

NUMBER OF SEQUENCES: 160

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/520,946

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGTTCTTCGGCACCAGCAGCTGCC 95

Db 620 ATCAACATCCGCGCGTTCGCGCGATCAAGAGTTCTTCGGCACCAGCAGCTGAGC 561

QY 96 CAGTTATGACACAGAACCCGCTCGCGGCTCACACAGCGCGCTGTCCGCG 155

Db 560 CAATTATGACACAGAACCCGCTCGCGGTTGACCCACAGCGCGCTGTCCGCG 501

QY 156 CTGGCGCGCGTGTCTCTCCCGGAGCGCGCGCTGAGGTCGCGAGCTGCACCG 215

Db 500 CTGGCGCGCGGCTGTCTCAGTGAGGTCGCGGCTGAGGTCGCGAGCTGCACCG 441

QY 216 TCCCACTACGCGCGATGTCGCGATCAGACCCCGGAGGTCGCGAGCTGTGATC 275

Db 440 TCGCACTACGCGCGATGTCGCGATCGAAACCCCTGAGGCGCCCAACATCGTGTGATC 381

QY 276 GGCTCGCTGTGCTGTATGCGCGGTCACCGGTTTCGCGGTTTCATCGACCGCGTACCGC 335

Db 380 GGCTCGCTGTGCTGTATGCGCGGTCACCGGTTTCGCGGTTTCATCGAAACCGCGTACCGC 321

QY 336 AAGTGGTTCGACGGGTTGTCTACCGACGAGATCCACTACCTGACCGCGCGAGAGGAC 395

Db 320 AAGTGGTTCGACGGGTTGTAGCGACGAGATCGTGTACCTGACCGCGCGAGAGGAC 261

QY 396 CGCACGCTGTGGCGCAGGCCAACTCGCCGATCGACGACAGGGCGCGCTTCGCGAGGCC 455

Db 260 CGCACGCTGTGGCGCAGGCCAACTTCGCCGATCGATCGCGAGCTCGCTTCGTCGAGCG 201

QY 456 CGGCTGTGCTCGCGCGCAAGCGCGCGAGGTTCGAGTACGTGCGCGCTTCGCGAGGTGAC 515

Db 200 CGGCTGTGCTCGCGCGCAAGCGCGCGAGGTTCGAGTACGTGCGCGCTTCGCTGAGGTGAC 141

QY 516 TACATGACGCTGTCCGCGCGCAGATGTGTGCTGGCCACCGCGATGATCCGCTTCCTC 575

Db 140 TACATGACGCTGTCCGCGCGCAGATGTGTGCTGGCCACCGCGATGATCCGCTTCCTC 81

QY 576 GAGCACGACGCGCAACCGTCCCTGATGGCGCGCAACATGACGCGCGAGGTTCG 635

Db 80 GAGCACGACGCGCAACCGTCCCTGATGGCGCGCAACATGAGGAGTTCGCGCGCGGTGCG 21

QY 636 CTGGTGGCAGCGAGGCC 655

Db 20 CTGGTCCGTAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

APPLICANT: LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

TITLE OF INVENTION: PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/655,378A

FILING DATE: 05-Sep-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 135:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGTTCTTCGGCACCAGCAGCTGCC 95

Db 1 ATCAACATCCGCGCGTTCGCGCGATCAAGAGTTCTTCGGCACCAGCAGCTGAGC 60

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QY 96 CAGTTCATGACGACGACCAACCCGCTGTGCGGGCTACCCACAGCGCGCTGTGCGG 155
Db 61 CAATTCATGACGACGACCAACCCGCTGTGCGGGTTGACCCACAGCGCGCTGTGCGG 120
QY 156 CTGGGCGCGGCTGTGCTGTCGCGGAGCGCGCGGCTGAGGTCCCGACGTGACCCG 215
Db 121 CTGGGCGCGGCTGTGCTGTCGCGGAGCGCGCGGCTGAGGTCCCGACGTGACCCG 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGACACCCCGGAGGTCACACATCGTCTGATC 275
Db 181 TCCCACTACGCGCGGATGTCCCGATCGACACCCCGGAGGTCACACATCGTCTGATC 240
QY 276 GCGTCGCTGTGCTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCGTACCCG 335
Db 241 GCGTCGCTGTGCTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGACCGCGTACCCG 300
QY 336 AAGGTGGTGCAGCGGCTGTACCGGAGGATCCACTACTGACCGCGACGAGGAGGAC 395
Db 301 AAGGTGGTGCAGCGGCTGTACCGGAGGATCCACTACTGACCGCGACGAGGAGGAC 360
QY 396 CGCCACGTGGTGGCGGAGCGGCAACTCGCGATCGACGACGAGGAGGAGGAGGAGG 455
Db 361 CGCCACGTGGTGGCGGAGCGGCAACTCGCGATCGACGACGAGGAGGAGGAGGAGG 420
QY 456 CGGCTGCTGTGCTGTGCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 515
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QY 516 TACATGAGAGTGTGCGCGGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 575
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Db 601 CTGGTGGCAGCAGGAGGCGCC 620

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RESULT 13

US-09-655-378A-138/c

Sequence 138, Application US/09655378A

Patent No. 6673616

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA: US/09/655, 378A

FILING DATE: 05-Sep-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Score 530.4; DB 4; Length 620;

Query 36 ATCAACATCCGTCAGTCTGTCGCGGCGATCAAGGAGTCTTCGGCACCAAGCCAGCTGTCC 95

Db 620 ATCAACATCCGCGCGTGTGTCGCGCGATCAAGGAGTCTTCGGCACCAAGCCAGCTGTCC 561

QY 96 CAGTTTCATGCGACCAAGCAACCCGCTGTGCGGGCTACCCCAAGCGCGCTGTGCGG 155

Db 560 CAATTCATGCGACCAAGCAACCCGCTGTGCGGGTTGACCCCAAGCGCGCTGTGCGG 501

QY 156 CTGGGCGCGGCTGTGTCGCGGAGCGCGCGGCTGAGGTCGCGGAGGTCGCGGAGG 215

Db 500 CTGGGCGCGGCTGTGTCGCGGAGCGCGCGGCTGAGGTCGCGGAGGTCGCGGAGG 441

QY 216 TCCCACTACGCGCGGATGTGCGCGATCGAGACCCCGAGGCTCCCAACATCGTCTGATC 275

Db 440 TCGCACTACGCGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY 276 GGCTCGCTGTGCGGTATGCGCGGCTCAACCCGTTGCGGTTTCATCGAGCCCGTACCGC 335

Db 380 GGCTCGCTGTGCGGTATGCGCGGCTCAACCCGTTGCGGTTTCATCGAGCCCGTACCGC 321

QY 336 AAGTGTGTCAGCGCGCTGCTCACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGG 395

Db 320 AAGTGTGTCAGCGCGCTGCTCACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGG 261

QY 396 CGCCACGTGTGGCGCAGGCGCAACTCGCGATCGACGACGAGGCGCGCTTCGCGAGGCGC 455

Db 260 CGCCACGTGTGGCGCAGGCGCAACTCGCGATCGACGACGAGGCGCGCTTCGCGAGGCGC 201

QY 456 CGGCTGTGCTGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC 515

Db 200 CGGCTGTGCTGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC 141

QY 516 TACATGAGCTGTGCGCGCGCAGATGGTGTGCGCGCACCGGATGATCCGTTCTC 575

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QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635

Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 21

QY 636 CTGGTGGCAGCAGGAGGCGCC 655

Db 20 CTGGTGGCAGCAGGAGGCGCC 1

RESULT 14

US-08-757-653-136

Sequence 136, Application US/08757653

Patent No. 5843689

GENERAL INFORMATION:

APPLICANT: Kaiser, Michael W.

APPLICANT: Lyamichev, Victor I.

APPLICANT: Lyamichev, Natasha

TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

NUMBER OF SEQUENCES: 190



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GenCore version 5.1.6  
 Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds  
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Title: US-09-285-306-6  
 Perfect score: 705  
 Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgacgcggaagt 705

Scoring table: IDENTITY NUC  
 Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

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 Maximum Match 100%  
 Listing first 45 summaries

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- 14: /cgn2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10A\_PUBCOMB.seq\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq\*
- 17: /cgn2\_6/ptodata/1/pubpna/US10C\_PUBCOMB.seq\*
- 18: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq\*
- 19: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUBCOMB.seq\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	705	100.0	705	9	US-09-285-306-5
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4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-10
8	705	100.0	705	9	US-09-285-306-11
9	705	100.0	705	9	US-09-285-306-12
10	705	100.0	705	9	US-09-285-306-13
11	705	100.0	705	9	US-09-285-306-14
12	703.4	99.8	705	9	US-09-285-306-15
13	695	98.6	705	9	US-09-285-306-16
14	693.4	98.4	705	9	US-09-285-306-17

15	691	98.0	705	9	US-09-285-306-10
16	691	98.0	3444	13	US-10-282-122A-25737
17	687	97.4	687	9	US-09-285-306-18
18	687	97.4	687	9	US-09-285-306-19
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22	687	97.4	687	9	US-09-285-306-23
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45	635.8	90.2	687	9	US-09-285-306-46

## ALIGNMENTS

RESULT 1

US-09-285-306-4

; Sequence 4, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gigeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-4

Query Match					100.0%;	Score	705;	DB	9;	Length	705;
Best Local Similarity					100.0%;	Pred. No.	2.1e-154;				
Matches					705;	Conservative	0;	Mismatches	0;	Indels	0;
						Gaps	0;				
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DB	1	CCCAGGACGTGGAGCGCATCACCGACACCTGATCAACATCCGTCAGTCGTCGCGG	60								
QY	61	CGATCAAGAGTTCCTGGCCACCGACAGTTCATGACCAAGAACACCCGC	120								
DB	61	CGATCAAGAGTTCCTGGCCACCGACAGTTCATGACCAAGAACACCCGC	120								
QY	121	TGTCGGGCTCACCACAGCGCCCTGTGCGGCTGGCCGGTGTGTGTCTGTCCCGG	180								
DB	121	TGTCGGGCTCACCACAGCGCCCTGTGCGGCTGGCCGGTGTGTGTCTGTCCCGG	180								

Fri Aug 20 12:39:18 2004

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 Qy  
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 Db  
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RESULT 3

US-09-285-306-6  
 ; Sequence 6, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Ginteras, Thomas  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 6  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; US-09-285-306-6

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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 Db 1 CCCAGGAGTGGAGCGGATCACCGCAGACCGTTCATCAACATCCGTCAGTCGTGGCGG 60  
 Qy 61 CGATCAAGGAGTTCCTTCGCGACCGACGAGTGTCCAGTTCATGGACGACGACCAACCCGC 120  
 Db 61 CGATCAAGGAGTTCCTTCGCGACCGACGAGTGTCCAGTTCATGGACGACGACCAACCCGC 120

181 AGCGGCGGGCTGAGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240  
 Qy  
 181 AGCGGCGGGCTGAGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240  
 Db  
 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTCTCGTGTATGCGGG 300  
 Qy  
 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTCTCGTGTATGCGGG 300  
 Db  
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCACCGTGGT 360  
 Qy  
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCACCGTGGT 360  
 Db  
 361 ACGAGATCACTACCTGACCGCGGACGAGGAGCCGACCGTGGTGGCGCAGGCCAACT 420  
 Qy  
 361 ACGAGATCACTACCTGACCGCGGACGAGGAGCCGACCGTGGTGGCGCAGGCCAACT 420  
 Db  
 421 CGCCGATCGACACAAAGGCGCGTTTCGCGGAGCGCGGTTCTGTGTCGCGGAGCGG 480  
 Qy  
 421 CGCCGATCGACACAAAGGCGCGTTTCGCGGAGCGCGGTTCTGTGTCGCGGAGCGG 480  
 Db  
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGGACTACATGACGCTGTGTCGCGGAGCGG 540  
 Qy  
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGGACTACATGACGCTGTGTCGCGGAGCGG 540  
 Db  
 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCGTGGTGGCC 600  
 Qy  
 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCGTGGTGGCC 600  
 Db  
 601 TGATGGCGCCAAACATGACAGCGCGAGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 Qy  
 601 TGATGGCGCCAAACATGACAGCGCGAGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 Db  
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705  
 Qy  
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705  
 Db

RESULT 2

US-09-285-306-5  
 ; Sequence 5, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Ginteras, Thomas  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 5  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; US-09-285-306-5

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 CCCAGGAGTGGAGCGGATCACCGCAGACCGTTCATCAACATCCGTCAGTCGTGGCGG 60  
 Db 1 CCCAGGAGTGGAGCGGATCACCGCAGACCGTTCATCAACATCCGTCAGTCGTGGCGG 60  
 Qy 61 CGATCAAGGAGTTCCTTCGCGACCGACGAGTGTCCAGTTCATGGACGACGACCAACCCGC 120  
 Db 61 CGATCAAGGAGTTCCTTCGCGACCGACGAGTGTCCAGTTCATGGACGACGACCAACCCGC 120  
 Qy 121 TGTGCGGGCTCACCCAAAGCGCGCTGTGCGGCTGGGCGCGGTGTGTGTCGGGG 180



QY 121 TGTGGGGTCAACCAAGAGCGCCCTGTGGGCTGGGCGCGGCTGTGTGTCGCGGG 180  
 Db 121 TGTGGGGTCAACCAAGAGCGCCCTGTGGGCTGGGCGCGGCTGTGTGTCGCGGG 180  
 QY 181 AGCGGGCGGGCTGGAGGTCCGAGCTGACCGGTCCCACTACGGCCGATGTGCCCGA 240  
 Db 181 AGCGGGCGGGCTGGAGGTCCGAGCTGACCGGTCCCACTACGGCCGATGTGCCCGA 240  
 QY 241 TCAGAGCCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGGG 300  
 Db 241 TCAGAGCCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCCGCTACCGCAAGGTGGTCGAGCGGCTGGTCAACCG 360  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCCGCTACCGCAAGGTGGTCGAGCGGCTGGTCAACCG 360  
 QY 361 ACAGATCCACTACCTACCGCGGACGAGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420  
 Db 361 ACAGATCCACTACCTACCGCGGACGAGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAGGCGCGGTTCCGGAGGCGCGGCTGTGTCGCGCGCCAGAGCGG 480  
 Db 421 CGCCGATCGACGACAGGCGCGGTTCCGGAGGCGCGGCTGTGTCGCGCGCCAGAGCGG 480  
 QY 481 GCGAGTTCAGTACGTGCTCGAGAGGCGGCTGTGTCGAGAGGCTGTGTCGCGCGCCAGAG 540  
 Db 481 GCGAGTTCAGTACGTGCTCGAGAGGCGGCTGTGTCGAGAGGCTGTGTCGCGCGCCAGAG 540  
 QY 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCCTCGAGAGTGGACTACATGACAGCTGTGCGCGCCAGAG 600  
 Db 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCCTCGAGAGTGGACTACATGACAGCTGTGCGCGCCAGAG 600  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTCGAGAGGCGCGGCTGG 660  
 Db 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTCGAGAGGCGCGGCTGG 660  
 QY 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGAGCGCGGCGACGT 705  
 Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGAGCGCGGCGACGT 705

## RESULT 4

US-09-285-306-7

; Sequence 7, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 7

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-7

Query Match

Best Local Similarity 100.0%; Score 705; DB 9; Length 705;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGGATCACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

Db 1 CCCAGAGCTGGAGCGGATCACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

QY 61 CGATCAAGAGTTCCTCGGACACCGAGCTGTCCAGTTCATGACCAAGAACACCCGC 120

Db 61 CGATCAAGAGTTCCTCGGACACCGAGCTGTCCAGTTCATGACCAAGAACACCCGC 120  
 QY 121 TGTGGGGCTCAACCAAGAGCGCCCTGTGGGCTGGGCGCGGCTGTGTGTCGCGGG 180  
 Db 121 TGTGGGGCTCAACCAAGAGCGCCCTGTGGGCTGGGCGCGGCTGTGTGTCGCGGG 180  
 QY 181 AGCGGGCGGGCTGGAGGTCCGAGCTGACCGGTCCCACTACGGCCGATGTGCCCGA 240  
 Db 181 AGCGGGCGGGCTGGAGGTCCGAGCTGACCGGTCCCACTACGGCCGATGTGCCCGA 240  
 QY 241 TCAGAGCCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGGG 300  
 Db 241 TCAGAGCCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCCGCTACCGCAAGGTGGTCGAGCGGCTGGTCAACCG 360  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCCGCTACCGCAAGGTGGTCGAGCGGCTGGTCAACCG 360  
 QY 361 ACAGATCCACTACCTACCGCGGACGAGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420  
 Db 361 ACAGATCCACTACCTACCGCGGACGAGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAGGCGCGGTTCCGGAGGCGCGGCTGTGTCGCGCGCCAGAGCGG 480  
 Db 421 CGCCGATCGACGACAGGCGCGGTTCCGGAGGCGCGGCTGTGTCGCGCGCCAGAGCGG 480  
 QY 481 GCGAGTTCAGTACGTGCTCGAGAGGCGGCTGTGTCGAGAGGCTGTGTCGCGCGCCAGAG 540  
 Db 481 GCGAGTTCAGTACGTGCTCGAGAGGCGGCTGTGTCGAGAGGCTGTGTCGCGCGCCAGAG 540  
 QY 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCCTCGAGAGTGGACTACATGACAGCTGTGCGCGCCAGAG 600  
 Db 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCCTCGAGAGTGGACTACATGACAGCTGTGCGCGCCAGAG 600  
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTCGAGAGGCGCGGCTGG 660  
 Db 601 TGATGGGCGCCAAACATGACGCGCCAGGCGGTTCCGCTGTCGAGAGGCGCGGCTGG 660  
 QY 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGAGCGCGGCGACGT 705  
 Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATCGAGCGCGGCGACGT 705

## RESULT 5

US-09-285-306-8

; Sequence 8, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 8

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-8

Query Match

Best Local Similarity 100.0%; Score 705; DB 9; Length 705;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGGATCACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

Db 1 CCCAGAGCTGGAGCGGATCACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

1 CCCAGGACGTGGAGCGCATCACCCGAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60  
 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGAGACAGAACCAACCCGC 120  
 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGAGACAGAACCAACCCGC 120  
 121 TGTCCGGGCTCACCAACAGCCGCTGTCCGGCTGTGGGCCCGGGTGTCTGTCCCGGG 180  
 121 TGTCCGGGCTCACCAACAGCCGCTGTCCGGCTGTGGGCCCGGGTGTCTGTCCCGGG 180  
 181 AGCGGCCGGGCTGAGGTCCGACAGCTGCCCTCCACTACCGCCGGGATGTGCCCGA 240  
 181 AGCGGCCGGGCTGAGGTCCGACAGCTGCCCTCCACTACCGCCGGGATGTGCCCGA 240  
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTCTGTCCGTGTATGCGCGG 300  
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTCTGTCCGTGTATGCGCGG 300  
 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTCCACG 360  
 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTCCACG 360  
 361 ACAGATCACTACCTGACCGCCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT 420  
 361 ACAGATCACTACCTGACCGCCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT 420  
 421 CCGCGATCGACACAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCG 480  
 421 CCGCGATCGACACAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCG 480  
 481 GCGAGTCAAGTACGTGCCCTCGTCGAGTGGACTACATGACGCTGTCCGCGCCAGA 540  
 481 GCGAGTCAAGTACGTGCCCTCGTCGAGTGGACTACATGACGCTGTCCGCGCCAGA 540  
 541 TGTGTCCGTGGCCACCGCATCCGTTCTCGAGACGACGACGACGACGACGACGACGACG 600  
 541 TGTGTCCGTGGCCACCGCATCCGTTCTCGAGACGACGACGACGACGACGACGACGACG 600  
 601 TGATGGCGGCAACATGACGCGCAGCGGTTCCGTTGGTGGCGAGGCGCGGCTGG 660  
 601 TGATGGCGGCAACATGACGCGCAGCGGTTCCGTTGGTGGCGAGGCGCGGCTGG 660  
 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705  
 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705

RESULT 7

US-09-285-306-12  
 ; Sequence 12, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingers, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 12  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGAGACAGAACCAACCCGC 120  
 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCATGAGACAGAACCAACCCGC 120  
 121 TGTCCGGGCTCACCAACAGCCGCTGTCCGGCTGTGGGCCCGGGTGTCTGTCCCGGG 180  
 121 TGTCCGGGCTCACCAACAGCCGCTGTCCGGCTGTGGGCCCGGGTGTCTGTCCCGGG 180  
 181 AGCGGCCGGGCTGAGGTCCGACAGCTGCCCTCCACTACCGCCGGGATGTGCCCGA 240  
 181 AGCGGCCGGGCTGAGGTCCGACAGCTGCCCTCCACTACCGCCGGGATGTGCCCGA 240  
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTCTGTCCGTGTATGCGCGG 300  
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTCTGTCCGTGTATGCGCGG 300  
 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTCCACG 360  
 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTCCACG 360  
 361 ACAGATCACTACCTGACCGCCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT 420  
 361 ACAGATCACTACCTGACCGCCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT 420  
 421 CCGCGATCGACACAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCG 480  
 421 CCGCGATCGACACAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCGCGGTTCCGGAGGCG 480  
 481 GCGAGTCAAGTACGTGCCCTCGTCGAGTGGACTACATGACGCTGTCCGCGCCAGA 540  
 481 GCGAGTCAAGTACGTGCCCTCGTCGAGTGGACTACATGACGCTGTCCGCGCCAGA 540  
 541 TGTGTCCGTGGCCACCGCATCCGTTCTCGAGACGACGACGACGACGACGACGACGACG 600  
 541 TGTGTCCGTGGCCACCGCATCCGTTCTCGAGACGACGACGACGACGACGACGACGACG 600  
 601 TGATGGCGGCAACATGACGCGCAGCGGTTCCGTTGGTGGCGAGGCGCGGCTGG 660  
 601 TGATGGCGGCAACATGACGCGCAGCGGTTCCGTTGGTGGCGAGGCGCGGCTGG 660  
 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705  
 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705

RESULT 6

US-09-285-306-9  
 ; Sequence 9, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingers, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 9  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CCCAGGACGTGGAGCGCATCACCCGAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60

Qy	1	CCAGGACGTGGAGGGGATCACACCGCAGACCTGTATCAACATCCGTCAGTCTGTGGCGG	60
Db	1	CCAGGACGTGGAGGGGATCACACCGCAGACCTGTATCAACATCCGTCAGTCTGTGGCGG	60
Qy	61	CGATCAGGAGTTCCTTCGGACACAGCCAGTGTCCCAGTTTCATGACACAGAAACAACCCGC	120
Db	61	CGATCAAGGAGTTCCTTCGGACACAGCCAGTGTCCCAGTTTCATGACACAGAAACAACCCGC	120
Qy	121	TGTCGGGGCTCACCCACAAGCGCCGCTGTCCGGCTGTGGGCCCGGTGTCTGTCCCGGG	180
Db	121	TGTCGGGGCTCACCCACAAGCGCCGCTGTCCGGCTGTGGGCCCGGTGTCTGTCCCGGG	180
Qy	181	AGGGGCGCGGCTTGGAGSTCCGCGACGTGCACCCGTCACCACACTACGCGCGGATGTGCCGA	240
Db	181	AGCGGCGCGGCTTGGAGSTCCGCGAGTGCACCCGTCACCACACTACGCGCGGATGTGCCGA	240
Qy	241	TCGAGACCCGAGGGTCCCAACATCGTCTGTATCGGCTCGTGTCCGTGTATGCGCGG	300
Db	241	TCGAGACCCGAGGGTCCCAACATCGTCTGTATCGGCTCGTGTCCGTGTATGCGCGG	300
Qy	301	TCAAACCCGTTCCGGTTTCATCCGAGACCGCTACCGCAAGTGTGTGACGCGGTGTCACCG	360
Db	301	TCAAACCCGTTCCGGTTTCATCCGAGACCGCTACCGCAAGTGTGTGTCACGCGTGTGTCACCG	360
Qy	361	ACGAGATCCACTACTGTACCGCCGACGAGGAGCCGCCACGTGTGTGGCGCAGGCCAACT	420
Db	361	ACGAGATCCACTACTGTACCGCCGACGAGGAGCCGCCACGTGTGTGGCGCAGGCCAACT	420
Qy	421	CGCGATCGACGAAGGGCCGTTTCGGAGAGCCCGGGTGTGTGTCCGCGCGAAGCGG	480
Db	421	CGCGATCGACGAAGGGCCGTTTCGGAGAGCCCGGGTGTGTGTCCGCGCGAAGCGG	480
Qy	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540
Db	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540
Qy	541	TGTTGTTCGGTGGCCACCGCGATGATCCGTTTCCTTCGAGACGACGACGCGCCGCGCC	600
Db	541	TGTTGTTCGGTGGCCACCGCGATGATCCGTTTCCTTCGAGACGACGACGCGCCGCGCC	600
Qy	601	TGATGGCGGCGCAATGCGAGCGCCAGCGGTTCCGCTTGGTGGCAGCGAGGCGCGCTGG	660
Db	601	TGATGGCGGCGCAATGCGAGCGCCAGCGGTTCCGCTTGGTGGCAGCGAGGCGCGCTGG	660
Qy	661	TGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCAAGT	705
Db	661	TGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCAAGT	705

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gigeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 131
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

```

Query Match

Best Local Similarity 100.0%; Pred. No. 2.1e-154; Matches 705; Conservative 0; Mismatches 0; Indels			
QY	1	CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTC	
Db	1	CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTC	
QY	61	CGATCAAGGAGTCTTCGSGCACCGACAGTGTCCAGTTCATGGACCG	
Db	61	CGATCAAGGAGTCTTCGGCACCGACAGTGTCTCCAGTTCATGGACCG	
QY	121	TGTCGGGCTCACCCACAAGCGCCGCTTCGCGCTGGSCCCCGGGTG	
Db	121	TGTCGGGCTCACCCACAAGCGCCGCTGTGCGGCTGGGCCCCGGGTG	
QY	181	AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCTCACTACGGCC	
Db	181	AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCTCACTACGGCC	
QY	241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCG	
Db	241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCG	
QY	301	TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGAAGGTGTGACGCG	
Db	301	TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGAAGGTGTGACGCG	
QY	361	ACGAGATCCACTACTTCGACCGCCGACGAGGAGGACCGCAGCTGTGG	
Db	361	ACGAGATCCACTACTTCGACCGCCGACGAGGAGGACCGCAGCTGTGG	
QY	421	CGCCGATCGACGACAGGGCCGGTTCCGAGGCCCCGGGTGCTGTCTCC	
Db	421	CGCCGATCGACGACAGGGCCGGTTCCGAGGCCCCGGGTGCTGTCTCC	
QY	481	GCGAGTCTCAGTACGTGCCCTCGTCCGAGTGGACTACATGGAAGTGT	
Db	481	GCGAGTCTCAGTACGTGCCCTCGTCCGAGTGGACTACATGGAAGTGT	
QY	541	TGGTTCGGTGCCACCGCGATGATCCCGTTCTCTCGAGCGACGACGCG	
Db	541	TGGTTCGGTGCCACCGCGATGATCCCGTTCTCTCGAGCGACGACGCG	
QY	601	TGATGGGCGCCAACTGACGCCAGGCGGTTCGCTGGTGGCAGCGA	
Db	601	TGATGGGCGCCAACTGACGCCAGGCGGTTCGCTGGTGGCAGCGA	
QY	661	TGGGCACCGCATGAGCTCGCGCGCGCGATTCGACGCGGCGAGT 705	
Db	661	TGGGCACCGCATGAGCTCGCGCGCGCGATTCGACGCGGCGAGT 705	

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

```

ORGANISM: Mycobacterium avium  
US-09-285-306-16  
Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2,1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCTGATCAATCGCTCAGTCTGGCGG 60  
DB 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCTGATCAATCGCTCAGTCTGGCGG 60  
QY 61 CGATCAAGAGATTCTTCGGCACCAGCGAGCTGTCCTCCAGTTCATGACCAACAACCCGC 120  
DB 61 CGATCAAGAGATTCTTCGGCACCAGCGAGCTGTCCTCCAGTTCATGACCAACAACCCGC 120  
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCGGCGCTGGGCCCGGTGTGTCTCCCGG 180  
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCGGCGCTGGGCCCGGTGTGTCTCCCGG 180  
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGCCCCA 240  
DB 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGCCCCA 240  
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300  
DB 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300  
QY 301 TCACCCCGTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360  
DB 301 TCACCCCGTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360  
QY 361 ACCAGATCCACTACTGACCGCGCAGAGGAGACCGCAGCTGCTGGTGGCGAGCCAACT 420  
DB 361 ACCAGATCCACTACTGACCGCGCAGAGGAGACCGCAGCTGCTGGTGGCGAGCCAACT 420  
QY 421 CGCGGATCGACGACAGGGCGGTTCCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480  
DB 421 CGCGGATCGACGACAGGGCGGTTCCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480  
QY 481 GCAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
DB 481 GCAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAGCTGCC 600  
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAGCTGCC 600  
QY 601 TGATGGGCGCAACATGACGCGCGGCTGGTTCGCTGGTTCGCGAGCGCGCGCTGG 660  
DB 601 TGATGGGCGCAACATGACGCGCGGCTGGTTCGCTGGTTCGCGAGCGCGCGCTGG 660  
QY 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705  
DB 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705

RESULT 11  
US-09-285-306-24  
; Sequence 24, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 24

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2,1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCTGATCAATCGCTCAGTCTGGCGG 60  
DB 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCTGATCAATCGCTCAGTCTGGCGG 60  
QY 61 CGATCAAGAGATTCTTCGGCACCAGCGAGCTGTCCTCCAGTTCATGACCAACAACCCGC 120  
DB 61 CGATCAAGAGATTCTTCGGCACCAGCGAGCTGTCCTCCAGTTCATGACCAACAACCCGC 120  
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCGGCGCTGGGCCCGGTGTGTCTCCCGG 180  
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCGGCGCTGGGCCCGGTGTGTCTCCCGG 180  
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGCCCCA 240  
DB 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGCCCCA 240  
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300  
DB 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300  
QY 301 TCACCCCGTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360  
DB 301 TCACCCCGTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360  
QY 361 ACCAGATCCACTACTGACCGCGCAGAGGAGACCGCAGCTGCTGGTGGCGAGCCAACT 420  
DB 361 ACCAGATCCACTACTGACCGCGCAGAGGAGACCGCAGCTGCTGGTGGCGAGCCAACT 420  
QY 421 CGCGGATCGACGACAGGGCGGTTCCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480  
DB 421 CGCGGATCGACGACAGGGCGGTTCCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480  
QY 481 GCAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
DB 481 GCAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAGCTGCC 600  
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAGCTGCC 600  
QY 601 TGATGGGCGCAACATGACGCGCGGCTGGTTCGCTGGTTCGCGAGCGCGCGCTGG 660  
DB 601 TGATGGGCGCAACATGACGCGCGGCTGGTTCGCTGGTTCGCGAGCGCGCGCTGG 660  
QY 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705  
DB 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705

RESULT 10  
US-09-285-306-16  
; Sequence 16, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 16  
; LENGTH: 705  
; TYPE: DNA

```
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCGACGAGCTGCCAGTTCATGGACCAAGAAACACCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCGACGAGCTGCCAGTTCATGGACCAAGAAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGCGAGTCCGCGAGTCCCACTACGCGCGGATGTCGCCA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGAGTCCGCGAGTCCCACTACGCGCGGATGTCGCCA 240
QY 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
Db 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGTCAGCGGCTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGTCAGCGGCTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCACGTCGTGTGCGGCGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCACGTCGTGTGCGGCGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCGG 480
QY 481 GCGAGTCCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACGTCGTCGCGCGCAGA 540
Db 481 GCGAGTCCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACGTCGTCGCGCGCAGA 540
QY 541 TGCTGTGCGTGGCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGCGCGCC 600
Db 541 TGCTGTGCGTGGCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGCGCGCC 600
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGACGCGCGCGAGCT 705
Db 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGACGCGCGCGAGCT 705
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## RESULT 12

```
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
```

```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17
```

## Query Match

```
Best Local Similarity 99.9%; Score 703.4; DB 9; Length 705;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCGACGAGCTGCCAGTTCATGGACCAAGAAACACCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCGACGAGCTGCCAGTTCATGGACCAAGAAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGCGAGTCCGCGAGTCCCACTACGCGCGGATGTCGCCA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGAGTCCGCGAGTCCCACTACGCGCGGATGTCGCCA 240
QY 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
Db 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGTCAGCGGCTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGTCAGCGGCTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCACGTCGTGTGCGGCGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCACGTCGTGTGCGGCGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCGG 480
QY 481 GCGAGTCCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACGTCGTCGCGCGCAGA 540
Db 481 GCGAGTCCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACGTCGTCGCGCGCAGA 540
QY 541 TGCTGTGCGTGGCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGCGCGCC 600
Db 541 TGCTGTGCGTGGCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGCGCGCC 600
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGACGCGCGCGAGCT 705
Db 661 TGGGACCCGCGCATGGAGCTGCGCGCGCGCATGACGCGCGCGAGCT 705
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## RESULT 13

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US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
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; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
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Fri Aug 20 12:39:18 2004

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-11

Query Match 98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151; Indels 0; Gaps 0;
Matches 697; Conservative 0; Mismatches 8;

QY 1 CCCAGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 1 CCCAGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCGCCAGTTTCATGACCAACACCGC 120
DB 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCGCCAGTTTCATGACCAACACCGC 120
QY 121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGAGAGTCCGCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 240
DB 181 AGCGGCGCGGCTGAGAGTCCGCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 240
QY 241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 300
DB 241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTCAGCGCGTGTACCG 360
DB 301 TGAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTCAGCGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCGGAGGAGCCGACCTGCTGCTGGTGGCGAGGCGCAACT 420
DB 361 ACAGATCCACTACTGACCGCGGAGGAGCCGACCTGCTGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGTTGCTGTCCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGTTGCTGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGAGTACATGACCTGTGTCGCGCGCGCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGAGTACATGACCTGTGTCGCGCGCGCAGA 540
QY 541 TGGTGTCCGTGGCCACCGGATGCCCTTCTCGAGCACGACGACGACGACCGTGGCC 600
DB 541 TGGTGTCCGTGGCCACCGGATGCCCTTCTCGAGCACGACGACGACGACCGTGGCC 600
QY 601 TGAATGGGCGCCCAACATGACGAGCGCGGTTCCGTGTGCGCAGCGGCGCGCTGG 660
DB 601 TGAATGGGCGCCCAACATGACGAGCGCGGTTCCGTGTGCGCAGCGGCGCGCTGG 660

; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-3

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152; Indels 6; Gaps 0;
Matches 695; Conservative 4; Mismatches 6;

QY 1 CCCAGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 1 CCCAGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCGCCAGTTTCATGACCAACACCGC 120
DB 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCGCCAGTTTCATGACCAACACCGC 120
QY 121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGCGCTGGGCGCGGGTGTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGAGAGTCCGCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 240
DB 181 AGCGGCGCGGCTGAGAGTCCGCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 240
QY 241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 300
DB 241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTCAGCGCGTGTACCG 360
DB 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGTCAGCGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCGGAGGAGCCGACCTGCTGCTGGTGGCGAGGCGCAACT 420
DB 361 ACAGATCCACTACTGACCGCGGAGGAGCCGACCTGCTGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGTTGCTGTCCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGTTGCTGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGAGTACATGACCTGTGTCGCGCGCGCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGAGTACATGACCTGTGTCGCGCGCGCAGA 540
QY 541 TGGTGTCCGTGGCCACCGGATGCCCTTCTCGAGCACGACGACGACGACCGTGGCC 600
DB 541 TGGTGTCCGTGGCCACCGGATGCCCTTCTCGAGCACGACGACGACGACCGTGGCC 600
QY 601 TGAATGGGCGCCCAACATGACGAGCGCGGTTCCGTGTGCGCAGCGGCGCGCTGG 660
DB 601 TGAATGGGCGCCCAACATGACGAGCGCGGTTCCGTGTGCGCAGCGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGAGTTCGCGCGCGGATGACGCGCGGCGAGCT 705
DB 661 TGGGCAACCGGATGAGAGTTCGCGCGCGGATGACGCGCGGCGAGCT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A

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Db 601 TGATGGGCGCAACATGACGGCCAGCGGTTCGGTGGTGGCAGCGAGCGCGCGCTGG 660  
QY 661 TGGGACCGGATGGAGCTCGGCGCGGCGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGATGGAGCTCGGCGCGGCGATGACGCGGCGACGT 705  
RESULT 15  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 3.7e-151;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGGAGCGGATCACACGCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60  
Db 1 CCCAGGACGTGGAGCGGATCACACGCGAGACCCCTGATCAACATCCGTCCGTCTGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTCGGGACCGACCCAGCTGTCCAGTTCATGGACCAAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTCGGGACCGACCCAGCTGTCCAGTTCATGGACCAAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCAACAGCGCGCCCTGTGGCGCTGGGCGCGGGTGTGTCTCCCGGG 180  
Db 121 TGTGGGGCTCACCAACAGCGCGCCCTGTGGCGCTGGGCGCGGGTGTGTCTCCCGGG 180  
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGTCCACTACGCGCGGATGCCCCGA 240  
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGTCCACTACGCGCGGATGCCCCGA 240  
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATCGCGGG 300  
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATCGCGGG 300  
QY 301 TCACCCGTTCCGGTTCATCGAGACCGGTTACCGAAGGTGGTTCGACGGCGTGTACCG 360  
Db 301 TSACCCGTTCCGGTTCATCGAGACCCCGTTACCGAAGGTGGTTCGACGGCGTGTACCG 360  
QY 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCCAGCTGTGGTGGCGAGGCCAACT 420  
Db 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCCAGCTGTGGTGGCGAGGCCAACT 420  
QY 421 CGCGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGGTGTGGTCCGCGCAAGGCGG 480  
Db 421 CGCGATCGACGACAAAGGGCGGTTTCGGGAGGKCCCGGGTGTGGTCCGCGCAAGGCGG 480  
QY 481 GCGAGTCCGATGAGTCCCTCTCGTCCAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
Db 481 GCGAGTCCGATGAGTCCCTCTCGTCCAGGTGGACTACATGGACGTTCGCGCGCCAGA 540  
QY 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAAACCGTGCCC 600  
Db 541 TGGTGTGGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAAACCGTGCCC 600

QY 601 TGATGGGCGCAACATGACGGCCAGCGGTTCGGTGGTGGCAGCGAGCGCGCGCTGG 660  
Db 601 TGATGGGCGCAACATGACGGCCAGCGGTTCGGTGGTGGCAGCGAGCGCGCGCTGG 660  
QY 661 TGGGACCGGCGATGGAGCTCGGCGCGGCGATCGACGCGGCGACGT 705  
Db 661 TGGGACCGGCGATGGAGCTCGGCGCGGCGATCGACGCGGCGACGT 705

Search completed: August 20, 2004, 01:36:39  
Job time : 408.972 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-7

Perfect score: 705

Sequence: 1 cccaggacgtgagcgatc.....gscgatcgacgagcgacgt 705

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA.\*  
1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq.\*  
2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq.\*  
3: /cgn2\_6/ptodata/2/ina/6A\_COMB.seq.\*  
4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq.\*  
5: /cgn2\_6/ptodata/2/ina/PCTUS\_COMB.seq.\*  
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 36, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 1097, Ap
35	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 3177, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 20, Appl
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 35, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 401, App
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 111, App
40	249.8	35.4	11935	4	US-09-634-238-401	Sequence 1, Appli
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 4006, Ap
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 34, Appl
43	244.4	34.7	1830121	4	US-09-643-990A-1	
44	241.2	34.2	4143	4	US-09-328-352-406	
45	226.4	32.1	329	4	US-08-750-088A-34	

## ALIGNMENTS

## RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gigeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422



```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 761003 CCCAGGACGTGGAGCGCATCACACCGCAGAGCTTGATCAACATCCGCGCGGTGTGCGG 761062

Qy 61 CGATCAAGAGGTTCTTGGGACAGCCAGCGTGTCCAGTTGATGACCAAGAACACCGCG 120
Db 761063 CGATCAAGAGGTTCTTGGGACAGCCAGCGTGTCCAGTTGATGACCAAGAACACCGCG 761122

Qy 121 TGTGGGCTCACCACAAAGCGCCCTGTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
Db 761123 TGTGGGCTTACCCCAAGCGCCGACGTGTGGCGCTGGCGCGGTGTCTGTCCCGGG 761182

Qy 181 AGCGGCGCGGCTGAGGTCCGCGACGTGACCCGCTCCACTACCGCGCGGATGTCCCGGA 240
Db 761183 AGCGTGGCGGCTGAGGTCCGCGACGTGACCCGCTCCACTACCGCGCGGATGTCCCGGA 761242

Qy 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGTGTGATCGGTGTATGCGCGG 300
Db 761243 TCGAACCCTTGGGGGCCAACATCGTCTGATCGGTGTGATCGGTGTATGCGCGG 761302

Qy 301 TCAACCCGTTCCGGTTCTATCGAGCGCGTACCGCAAGGTGTGACGCGGTGTACCG 360
Db 761303 TCAACCCGTTCCGGTTCTATCGAAGCCGCTACCGCAAGGTGTGACGCGGTGTACCG 761362

Qy 361 ACGAGATCCACTTACCTGACCGCCGACGAGGACCGCACGTCGTGTGGCGAGGCAACT 420
Db 761363 ACGAGATCGTACTGACCGCCGACGAGGAGGACCGCACGTCGTGTGGCACAGGCCAAT 761422

Qy 421 CGCGATCGACGACAAAGGGCGGTTTCGGGAGGCGCGGTCGTGTGTCGCGCAAGGCGG 480
Db 761423 CGCGATCGATCGGACGCGTTCGTTCTGTCGAGCCGCGGTGTCGTGTCGCGCAAGGCGG 761482

Qy 481 GCGAGGTGAGTACGTGCTCCCTGTCGAGGTGGAATCATGACGTCGCGCGCCAGA 540
Db 761483 GCGAGGTGAGTACGTGCTCCCTGTCGAGGTGGAATCATGACGTCGCGCGCCAGA 761542

Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGACGACGACCCGTCGCC 600
Db 761543 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGCAGACGACGACCCGTCGCC 761602

Qy 601 TGATGGGCGCCMACATGACAGCGCCAGGCGGTTTCGCGTGGTGGCGAGGCGCGCTGG 660
Db 761603 TCATGGGCGCCMACATGACAGCGCCAGGCGGTTTCGCGTGGTGGCGAGGCGCGCTGG 761662

Qy 661 TGGGACCGGATGAGTGTGCGCGCGGATGACGCGG 699
Db 761663 TGGGACCGGATGAGTGTGCGCGCGGATGACGCGG 761701

RESULT 4
US-08-313-185-57
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```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/POCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGCGATCACCGCAGACCGCTGATCAATATCCGTCGCGTGTGCGG 1183

Qy 61 CGATCAAGAGTCTTCTGGGACCGACCGAGCTGCCAGTTTCATGACAGACACACCGCG 120
Db 1184 CTATCAAGAAATCTTTCGGACACCGACCGAGCTGTGTCAGTTTCATGATCAGAACACCCCTC 1243

Qy 121 TGTGGGCTCACCACAAAGCGCGCCCTGTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
Db 1244 TGTGGGCTGACCCACAAAGCGCGGCTGTGCGCGCTGGGCGCGGTGTGTGCGGTG 1303

Qy 181 AGCGGCGCGGCTCGAGGTCCGCGAGCGTGACACCGCTCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGCGCTAGAGGTCCGTCGAGTGCACCTTCGCACTACGCGCGGATGTGCCGA 1363

Qy 241 TCGAGACCCCGAGGCTCCCAACATCGCTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 1364 TCGAGACTCCGAGGCGCGGCGAATAGGTGTGATCGGTTCATTGTCGTTACGCGCGG 1423

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTCACGCGGTGTACCG 360
Db 1424 TCACCCCTTCGGTTTCATCGAACACCGTACCGCAAGGTGTGACGTTGTGTCAGCG 1483
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Qy	361	ACGAGATCCACTACCTACCGCCGACGAGAGAGACCGCCACGTGGTGGCGCAGGCCAACT	420
Db	1484	ACGAGATCGGAATACCTTGACCGCTGACGAGAAACCGCCATGTCGTGGCGCAGGCCAACT	1543
Qy	421	CGCCGATCGACGACAAAGGGCCGGTTCCGCGAGAGCCCGGGTGCTGGTCCGCGCGCAAGCGG	480
Db	1544	CGCCGATCGACGAGGCCGCGCTTCCTCGAGCCGCGCGTGTGGTGGCGCGCAAGCGCG	1603
Qy	481	GCAGGTCGAGTAGGTGCCTCGTCGAGGTGGACTACATGAGCGTGTCCGCGCGCCAGA	540
Db	1604	GCAGGTGGAGTAGTGGCTCGTCCGAGTGGATTACATGGATGTCTCGCCACGCCAGA	1663
Qy	541	TGTTGTTCGTGGCCACCGCATGATCCGCTTCCTCGAGCAGCAGCAGCGCAAACCGTGCCC	600
Db	1664	TGTTGTTCGTGGCCACAGCGATGATTCGTTTCCTTGAGCAGCAGCAGCGCAAACCGTGCCC	1723
Qy	601	TGATGGCGCCACATGTCAGCGCCAGCGGTTCGGTGTGGCAGCGAGGCGCCGTGG	660
Db	1724	TGATGGCGCGTAAATCATGACAGCCCAACGGGTTCGTTGGTGGCAGCGAAACGACGTTGG	1783
Qy	661	TGGCACCGCGCATGGAGCTCGCGCGCGCATCGACCGG	699
Db	1784	TGGGTACCGGTATCGAGTTGCGCGCGGCCATCGACGCTG	1822

## RESULT 5

```

US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
;
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis

```

## RESULT 6

US-08-250-030-1  
 ; Sequence 1, Application US/08250030  
 ; Patent No. 5643723  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Persing, David H.  
 ; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
 ; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
 ; TITLE OF INVENTION: Clinical Specimens  
 ; NUMBER OF SEQUENCES: 15  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Schwegman, Lundberg & Woessner  
 ; STREET: 3500 IDS Center  
 ; CITY: Minneapolis  
 ; STATE: MN  
 ; COUNTRY: USA

ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/250,030  
FILING DATE: 26-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Muecing, Ann M.  
REGISTRATION NUMBER: 33,977  
REFERENCE/DOCKET NUMBER: 150.105US1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
QY 1 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db |||||  
341 CCCAGACGTGAGGCGATCACACCCAGACCGTTGATCAACATCCGCCCGGTGGTCGCGG 400  
QY 61 CGATCAAGAGTCTTCGCGACACGACGACGAGTCCCGATTCATGACCAACACCCCGC 120  
Db |||||  
401 CGATCAAGAGTCTTCGCGACACGACGAGTCCCGATTCATGACCAACACCCCGC 460  
QY 121 TGTGGGGTTCACCCACAAAGCGCCCTGTGCGGCGTGGGCGCGGTGCTGTGTCGCGG 180  
Db |||||  
461 TGTGGGGTTCACCCACAAAGCGCCCTGTGCGGCGTGGGCGCGGTGCTGTGTCGCGG 520  
QY 181 AGCGGCGCGGCTGAGGTCCCGACAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 240  
Db |||||  
521 AGCGTGCAGGCTGAGGAGCGGACGAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 580  
QY 241 TCGACACCCCGAGGTCCTCAACATCCGTTCGAGTTCATGACCAACACCCCGC 300  
Db |||||  
581 TCGAACCCCTGAGGCGCGGACGAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 640  
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGCGGTGTCACCG 420  
Db |||||  
701 ACAGATCGTGTACCTGACCGCGAGGAGGACCGCCACGTCGTGCGGCGGCGCAACT 760  
QY 421 CGCGGATCGACGACGAGGCGGTCGCGGAGGCGCGGTGCTGTCGCGCGGCGGCGG 480  
Db |||||  
761 CGCGGATCGATGCGGACGCGTCTGTCGAGCGCGCGGTGCTGTCGCGCGGCGGCGG 820  
QY 481 GCGAGGTGAGTACGTGCGCTCTGTCGAGGTGAGTACATGACGAGTGTGCGGCGGCGGCGG 540  
Db |||||  
821 GCGAGGTGAGTACGTGCGCTCTGTCGAGGTGAGTACATGAGGAGTGTGCGGCGGCGGCGG 580  
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGACGCCAACCGTGGCC 600  
Db |||||  
881 TGGTGTGGTGGCCACCGCGATGATTCCTCTCTGAGCAGCAGACGCCAACCGTGGCC 630  
QY 601 TGATGGGCGCCAAATGACGAGCGGCGGCGG 630  
Db |||||  
941 TCATGGGCGCCAAATGACGAGCGGCGGCGG 970

RESULT 7  
PCT-US95-06790-1  
Sequence 1, Application PC/TUS9506790  
GENERAL INFORMATION:  
APPLICANT: Mayo Foundation for Medical Education and Research  
APPLICANT: and Hoffmann-La Roche Inc.  
TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
TITLE OF INVENTION: Resistance to Rifampin  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Schwegman, Lundberg & Woessner  
STREET: 3500 IDS Center  
CITY: Minneapolis  
STATE: MN  
COUNTRY: USA  
ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/06790  
FILING DATE: 26-MAY-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Raasch, Kevin W.  
REGISTRATION NUMBER: 35,651  
REFERENCE/DOCKET NUMBER: 150.105WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
QY 1 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db |||||  
341 CCCAGACGTGAGGCGATCACACCCAGACCGTTGATCAACATCCGCCCGGTGGTCGCGG 400  
QY 61 CGATCAAGAGTCTTCGCGACACGACGACGAGTCCCGATTCATGACCAACACCCCGC 120  
Db |||||  
401 CGATCAAGAGTCTTCGCGACACGACGAGTCCCGATTCATGACCAACACCCCGC 460  
QY 121 TGTGGGGTTCACCCACAAAGCGCCCTGTGCGGCGTGGGCGCGGTGCTGTGTCGCGG 180  
Db |||||  
461 TGTGGGGTTCACCCACAAAGCGCCCTGTGCGGCGTGGGCGCGGTGCTGTGTCGCGG 520  
QY 181 AGCGGCGCGGCTGAGGTCCCGACAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 240  
Db |||||  
521 AGCGTGCAGGCTGAGGAGCGGACGAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 580  
QY 241 TCGACACCCCGAGGTCCTCAACATCCGTTCGAGTTCATGACCAACACCCCGC 300  
Db |||||  
581 TCGAACCCCTGAGGCGCGGACGAGTGCACCGGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 640  
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGCGGTGTCACCG 360  
Db |||||  
641 TCAACCCGTTCCGGTTCATCGAACGCGGTACCGCAAGGTGGTGCAGCGCGGTGTCACCG 700  
QY 361 ACAGATCGACTACCTGACCGCGGACGAGGAGGACCGCCACGTCGTGGCGGCGGCGGCAACT 420  
Db |||||



SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCGATGTCGGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 95  
 Db 620 ATCAACATCCGTCGATGTCGGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 561

QY 96 CAGTTTCATGACCAAGAAACACCGCTGTCGGGGCTCACCAACAGCGCGCTGTCCGG 155  
 Db 560 CAATTCATGACCAAGAAACACCGCTGTCGGGGTTGACCAACAGCGCGCTGTCCGG 501

QY 156 CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGGTCCGGACGTGACCCG 215  
 Db 500 CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGGTCCGGACGTGACCCG 441

QY 216 TCCCACTAGCGCGGATGTCGGCGATCGAGACCCGGAGGGTCCCAACATCGGTCGATC 275  
 Db 440 TCGCACTAGCGCGGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGATC 381

QY 276 GCCTCGCTGTCGTCGTCGGGGTCAACCGTTCGGGTTTCATCGAGACGCGTACCGC 335  
 Db 380 GCCTCGCTGTCGTCGTCGGGGTCAACCGTTCGGGTTTCATCGAAACGCGTACCGC 321

QY 336 AAGTGTGTGTCGCGGCTGTACCGACGAGATCACTACTGACCGCGACGAGGAGGAC 395  
 Db 320 AAGTGTGTGTCGCGGCTGTAGCGAGGAGATCGTACTGACCGCGACGAGGAGGAC 261

QY 396 CGCCAGTGTGCGGAGCCCAACTCGCGATCGACGACAAAGGCGCGTTCGGGAGGCC 455  
 Db 260 CGCCAGTGTGCGGAGCCCAATTGCGCGATCGATGCGGAGCGGTTCGTCGAGCGC 201

QY 456 CGGTCGTCGTCGCGGAGCGGCGAGGTCGAGTACGTCGCTCGCTCGGAGTGGAC 515  
 Db 200 CGGTCGTCGTCGCGGAGCGGCGAGGTCGAGTACGTCGCTCGCTCGGAGTGGAC 141

QY 516 TACATGAGCTGTGCGCGCGCAGATGTCGTCGGTGGCCACCGCGATGATCCGTTCTC 575  
 Db 140 TACATGAGCTGTGCGCGCGCAGATGTCGTCGGTGGCCACCGCGATGATTCCTTCTC 81

QY 576 GAGCAGCAGCGCCCAACCGTCCCTGATGGGGCCCAACATGACGCGCCAGGCGGTCCG 635  
 Db 80 GAGCAGCAGCGCCCAACCGTCCCTCATGGGGCCCAACATGACGCGCCAGGCGGTCCG 21

QY 636 CTGGTCCGAGGAGCGCC 655  
 Db 20 CTGGTCCGAGGAGCGCC 1

RESULT 10

US-08-520-946-135  
 Sequence 135, Application US/08520946  
 Patent No. 637424  
 GENERAL INFORMATION:  
 APPLICANT: BROW, MARY ANN D.  
 APPLICANT: LYAMICHEV, VICTOR I.  
 APPLICANT: OLIVE, DAVID M.  
 TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
 TITLE OF INVENTION: PATHOGENS  
 NUMBER OF SEQUENCES: 160  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MEDLEN & CARROLL  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA: US/08/520,946  
 APPLICATION NUMBER: US/08/520,946  
 FILING DATE:  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: CARROLL, PETER G.  
 REGISTRATION NUMBER: 32,837  
 REFERENCE/DOCKET NUMBER: FORS-01756  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 135:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCGATGTCGGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 95  
 Db 1 ATCAACATCCGTCGATGTCGGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 60

QY 96 CAGTTTCATGACCAAGAAACACCGCTGTCGGGGCTCACCAACAGCGCGCTGTCCGG 155  
 Db 61 CAATTCATGACCAAGAAACACCGCTGTCGGGGTTGACCAACAGCGCGCTGTCCGG 120

QY 156 CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGGTCCGGACGTGACCCG 215  
 Db 121 CTGGGCGCGGCTGTCTGTCGATGTCGGGCTGGAGGTCCGGACGTGACCCG 180

QY 216 TCCCACTAGCGCGGATGTCGGCGATCGAGACCCGGAGGGTCCCAACATCGGTCGATC 275  
 Db 181 TCGCACTAGCGCGGATGTCGGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCGATC 240

QY 276 GCCTCGCTGTCGTCGTCGGGGTCAACCGGTTTCGGGTTTCATCGAGACGCGGTACCG 335  
 Db 241 GCCTCGCTGTCGTCGTCGCGGGTCAACCGGTTTCGGGTTTCATCGAAACGCGGTACCG 300

QY 336 AAGTGTGTGTCGCGCGTGTCTACCGACGAGATCCACTACTGACCGCGCGACGAGGAGGAC 395  
 Db 301 AAGTGTGTGTCGCGCGTGTCTAGCGACGAGATCGTACTGACCGCGCGACGAGGAGGAC 360

QY 396 CGCCAGTGTGCGCGAGCGCCCAACTCGCGGATCGACGACAAAGCGCGGTTTCGGGAGGCC 455  
 Db 361 CGCCAGTGTGCGCGAGCGCCCAACTCGCGGATCGATCGCGACGCGTTCGTCGAGCGC 420

QY 456 CGGTCGTCGTCGCGGAGCGCGGAGGTCGAGTACGTCGCTCGCTCGGAGGTGGAC 515  
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QY 516 TACATGAGCTGTGCGCGCGCAGATGTCGTCGGTGGCCACCGCGATGATCCGTTCTC 575  
 Db 481 TACATGAGCTGTGCGCGCGCAGATGTCGTCGGTGGCCACCGCGATGATTCCTTCTC 540

QY 576 GAGCAGCAGCGCCCAACCGTCCCTGATGGGGCCCAACATGACGCGCCAGGCGGTCCG 635  
 Db 541 GAGCAGCAGCGCCCAACCGTCCCTCATGGGGCCCAACATGACGCGCCAGGCGGTCCG 600

QY 636 CTGGTCCGAGGAGCGCC 655



Db 601 CTGTCCTAGCAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: IBM PC compatible

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTC 95

Db 620 ATCAACATCCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGAGC 561

QY 96 CAGTTATGACACAGAAACACCCGCTGTCGGGGCTCACCACAAAGCGCCGCTGTGGCG 155

Db 560 CAATTATGACACAGAAACACCCGCTGTCGGGGTTGACCACAAAGCGCCGACTGTGGCG 501

QY 156 CTGGGCGCGGTGCTGTCGCGGAGCGCGGCTGAGGTCGCGAGCTGCACCCG 215

Db 500 CTGGGCGCGGTGCTGTCGCGGAGCGCGGCTGAGGTCGCGAGCTGCACCCG 441

QY 216 TCCACTAGCGCGGATGTCGCGGATCGAGACCCGAGGTCGCCAACATCGCTCTGATC 275

Db 440 TCGCACTAGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCAACATCGCTCTGATC 381

QY 276 GGCTCGCTGCTGATGTCGCGGTCACCCGTTGCGGTTATCGAGACCGCTACCGC 335

Db 380 GGCTCGCTGCTGATGTCGCGGTCACCCGTTGCGGTTATCGAAACCGCTACCGC 321

QY 336 AAGGTGCTGACCGCGGTGTCACCGAGAGTCCACTTACTGACCGCGGACGAGGAGGAC 395

Db 320 AAGTGTGACCGCGGTGTTAGGACGAGATCTGTACTGTACCGCGGACGAGGAGGAC 261

QY 396 CGCCACGTGTCGCGGCGGCAACTCGCGGATCGAGCAAGGGCCGCTTCGCGGAGGCC 455

Db 260 CGCCACGTGTCGCGGCGGCAACTTCGCGGATCGAGCAAGGGTCGCTTCGTCGAGCGC 201

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Db 140 TACATGACGTGTCGCGGCGGCAAGGTGTCGTCGTCGCGCACCGGATGATCCGTTCTC 81

QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 635

Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 21

QY 636 CTGTCGTCGTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 655

Db 20 CTGTCGTCGTCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: IBM PC compatible

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTC 95

Db 1 ATCAACATCCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGAGC 60



QY 96 CAGTTTCATGGACCAAGCAACCCGCTGTGGGGCTCAACCAAGGGCGCCCTGTCTGGCG 155  
Db 61 CAATTTCATGGACCAAGCAACCCGCTGTGGGGTTGACCCCAAGCGCGCACTGTCTGGCG 120  
QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGGGCGGGCTGGAGGTCCGGACGTGCACCG 215  
Db 121 CTGGGCGCGGGTGTCTGTACGTGAGCGTCCGGGTGGAGTTCGGACGTGCACCG 180  
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240  
QY 276 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAGCGCGTACCGC 335  
Db 241 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAAACGCGTACCGC 300  
QY 336 AAGTGTGTGCGAGCGGTGTCTACCGACAGATCCACTACTCTACCGCGACGAGGAGGAC 395  
Db 301 AAGTGTGTGCGAGCGGTGTCTAGCGAGATCGTGTACTCTACCGCGACGAGGAGGAC 360  
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCGATCGAGCAAGGGCGCGTTCGCGAGGCC 455  
Db 361 CGCCACGTGGTGGCGAGGCCAACTCGCGATCGATGCGGACGGTCTGCTTCGAGCGC 420  
QY 456 CGGTGTGTCTCGCGCGGCAAGCGGGCGAGGTGAGTCTGCTGCGAGTGGAC 515  
Db 421 CGGTGTGTCTCGCGCGGCAAGCGGGCGAGGTGAGTCTGCTGCGAGTGGAC 480  
QY 516 TACATGGAGTGTCTCGCGCGGCGAGTGTCTGGTGGCGACCGCGATGATCCCGTTCTTC 575  
Db 481 TACATGGAGTGTCTCGCGCGGCGAGTGTCTGGTGGCGACCGCGATGATTCCTTCCTG 540  
QY 576 GAGCACGACGACCAACCGTSCCTGTATGGCGGCCAAACATGACGCGCAGCGGTTCG 635  
Db 541 GAGCACGACGACCAACCGTSCCTGTATGGCGGCCAAACATGACGCGCAGCGGTTCG 600  
QY 636 CTGGTGGCGAGGAGCGGCC 655  
Db 601 CTGGTGGCGAGGAGCGGCC 620

RESULT 13

US-09-655-378A-138/c  
; Sequence 138, Application US/09655378A  
; Patent No. 6673616  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; OLIVE, DAVID M.  
; LYAMICHEV, VICTOR I.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/655,378A  
; FILING DATE: 05-Sep-2000  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:  
US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
QY 36 ATCAACATCCGTCAGTCTGTGCGCGCATCAAGAGATTCTTCGGCACACAGCCAGTGTCC 95  
Db 620 ATCAACATCCGCGCGGTGTGTCCCGCATCAAGAGATTCTTCGGCACACAGCCAGTGTGAC 561  
QY 96 CAGTTTCATGGACCAAGCAACCCGCTGTGGGGGTCAACCAAGCGCGCTGTCTGGCG 155  
Db 560 CAATTTCATGGACCAAGCAACCCGCTGTGGGGTTGACCCCAAGCGCGCACTGTCTGGCG 501  
QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGGGCGGGCTGGAGGTCCGGACGTGCACCGC 215  
Db 500 CTGGGCGCGGGTGTCTGTACGTGAGGTGCGGGCTGGAGGTCCGGACGTGCACCGC 441  
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 440 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGCTCGCTGTCTGGTGTATGCGCGGGTCAACCGTTCGGGTTCATCGAGACGCGGTACCGC 335  
Db 380 GGCTCGCTGTCTGGTGTATGCGCGGGTCAACCGTTCGGGTTCATCGAAACGCGGTACCGC 321  
QY 336 AAGTGTGTGCGAGCGGTGTCTACCGACGAGATCCTACTCTACCGCGCAGGAGGAC 395  
Db 320 AAGTGTGTGCGAGCGGTGTCTAGCGACGAGATCTGTGTACCGCGCAGGAGGAC 261  
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCGATCGAGCAAGGGCGCGTTCGCGAGGCC 455  
Db 260 CGCCACGTGGTGGCGAGGCCAACTCGCGATCGATGCGACGCTGCTTCGTTCGAGCGC 201  
QY 456 CGGTGTGTCTCGCGCGCAAGCGCGGAGGTCTGATGCGTCCCTCTCGTCCGAGGTGGAC 515  
Db 200 CGGTGTGTCTCGCGCGCAAGCGCGGAGGTCTGATGCGTCCCTCTCGTCTGAGGTGGAC 141  
QY 516 TACATGGAGTGTCTCGCGCGCGAGTGTGTCTGGTGGCGCACCGCATGATCCCGTTCCTC 575  
Db 140 TACATGGAGTGTCTCGCGCGCGAGTGTGTCTGGTGGCGCACCGCATGATTCCTTCCTG 81  
QY 576 GAGCACGACGACCAACCGTSCCTGTATGGCGGCCAAACATGACGCGCAGCGGTTCG 635  
Db 80 GAGCACGACGACCAACCGTSCCTGTATGGCGGCCAAACATGACGCGCAGCGGTTCGCG 21  
QY 636 CTGGTGGCGAGGAGCGGCC 655  
Db 20 CTGGTGGCGAGGAGCGGCC 1

RESULT 14

US-08-757-653-136  
; Sequence 136, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190

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CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACACGACGCTGTC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTCTTCGGCACACGACGCTGAGC 60
QY 96 CAGTTATGACACAGAACACCCGCTGTGGGGGTCAACCAAGCGCGCGCTGTGGCG 155
DB 61 CAATTATGACACAGAACACCCGCTGTGGGGTGTGACCTACAAAGCGCGGACTGTGGCG 120
QY 156 CTGGGCGCGGTGTCTCCGGGAGCGCGGGCTGAGGTCCGCGACGTGCACCG 215
DB 121 CTGGGCGCGCGGTCTGTACGTGAGCGTGTGGGGTGTGAGGTCCGCGACGTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
DB 181 TCACACTACGCGCGGATGTGCCGATCGAGACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTCTGATGTGCGGGGTCAACCCGCTTCCGGTTCATCGAGAGCGCGGTACCGC 335

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACACGACGCTGTC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTCTTCGGCACACGACGCTGAGC 60
QY 96 CAGTTATGACACAGAACACCCGCTGTGGGGGTCAACCAAGCGCGCGCTGTGGCG 155
DB 61 CAATTATGACACAGAACACCCGCTGTGGGGTGTGACCTACAAAGCGCGGACTGTGGCG 120
QY 156 CTGGGCGCGGTGTCTCCGGGAGCGCGGGCTGAGGTCCGCGACGTGCACCG 215
DB 121 CTGGGCGCGCGGTCTGTACGTGAGCGTGTGGGGTGTGAGGTCCGCGACGTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
DB 181 TCACACTACGCGCGGATGTGCCGATCGAGACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTCTGATGTGCGGGGTCAACCCGCTTCCGGTTCATCGAGAGCGCGGTACCGC 335
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QY 336 AAGTGTGTGACGCGCGGTGTACCGAGAGATCACTACCTGACCGCGCGGAGGAG 395
DB 301 AAGTGTGTGACGCGCGGTGTGAGCGAGATGTGACCTGACCGCGCGGAGGAG 360
QY 396 CGCCACGTGTGGCGCGAGGCACTCCCGGATCGACGACGAGGCGCGGTTCGCGGAGGCC 455
DB 361 CGCCACGTGTGGCGAGGCACTTCGCGGATCGATCGGAGCGGTCTGTCGAGCGCG 420
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QY 516 TACATGACGTGTGCGCGCGGAGGTGTGCGGTGCGCACCGGATGATCCGTTCTCTC 575
DB 481 TACATGACGTGTGCGCGCGGAGGTGTGCGGTGCGCACCGGATGATCCGTTCTCTC 540
QY 576 GAGCACGACGACGACCAACCGTGTGCGGCTGATGGGGGCCAAACATGACGCGCGGCGGTTCGC 635

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Db      301  AAGTGTGTCGAGCGGCGTGGTTAGCGACGAGATCGTGTACTCTGACCCGCGACGAGGAGAC 360
Qy      396  CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCCGGTTCGCGAGGCC 455
Db      361  CGCCACGTGTGGCGACAGGCCAAATTCGCCGATCGATGCGGACGGTCGCTTCGTCGAGCG 420
Qy      456  CGGTTGCTGTCCGCCGCAAGCGCGGCGAGGTGAGTACGTGCCCCCTCGTCGAGGTGGAC 515
Db      421  CGCGTGTGTGTCGCCCGCAAGCGGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
Qy      516  TACATGGACGTGTGCGCCGCGCAGATGTTGTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
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Qy      576  GAGCACGACGACGCCAAACCGTGCCCTGATGGCGGCCAAACATGACGCGCCAGGCGGTTCGG 635
Db      541  GAGCACGACGACGCCAAACCGTGCCCTCATGGGGGCAAAACATGACGCGCCAGGCGGTTCGG 600
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Db      601  CTGTTGCGTACGAGGCCCC 620
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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

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(without alignments)  
8488.468 Million cell updates/sec

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Perfect score: 705  
Sequence: 1 cccaggacgtgagcgatc.....ggcgatcagcgcgagcgt 705

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA:\*

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- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
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- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq:\*
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- 13: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq:\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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2	705	100.0	705	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	US-09-285-306-12	Sequence 12, Appli
8	705	100.0	705	US-09-285-306-13	Sequence 13, Appli
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appli
10	705	100.0	705	US-09-285-306-16	Sequence 16, Appli
11	705	100.0	705	US-09-285-306-24	Sequence 24, Appli
12	703.4	99.8	705	US-09-285-306-17	Sequence 17, Appli
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16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appli
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20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appli
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appli
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appli
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appli
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appli
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appli
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appli
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appli
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appli
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appli
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appli
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appli
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appli
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appli
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appli
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appli
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appli
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appli
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appli
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

## ALIGNMENTS

RESULT 1  
US-09-285-306-4  
; Sequence 4, Application US/09285306A  
; Publication NO. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match		100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity		100.0%;	Pred. No. 2.1e-154;		
Matches 705;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCAGGAGCTGGAGCGGATCAACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60		
Db	1	CCAGGAGCTGGAGCGGATCAACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60		
QY	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC	120		
Db	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC	120		
QY	121	TGTCGGGGCTACCCACAGCGCCCTGTGGCGCTGGCGCGGTGTGTGTCCCGGG	180		
Db	121	TGTCGGGGCTACCCACAGCGCCCTGTGGCGCTGGCGCGGTGTGTGTCCCGGG	180		

```
QY 181 AGCGGCGGGCTCGAGGTCCGCAAGTGCACCGTCCCCTACCTACCGCGGATGTGCCGA 240
Db 181 AGCGGCGGGCTCGAGGTCCGCAAGTGCACCGTCCCCTACCTACCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCGGAGGGTCCCAACATCGTCTGTGATCGGCTCGCTGTGATCGGGG 300
Db 241 TCAGAGACCCGGAGGGTCCCAACATCGTCTGTGATCGGCTCGCTGTGATCGGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTCAACG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTCAACG 360
QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTCGCGCAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGGCTTCGTCGAGTGGACTACATGAGAGTGTTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGGCTTCGTCGAGTGGACTACATGAGAGTGTTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
QY 601 TGATGGGCGCCAAATGATGAGCGCGCGGTTCCGCTGCTGCGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGATGAGCGCGCGGTTCCGCTGCTGCGCAGGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGTTCGCGCGCGGATTCGACGCGCGGACGT 705
Db 661 TGGCACCGCATGGAGTTCGCGCGCGGATTCGACGCGCGGACGT 705
```

## RESULT 2

```
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

```
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACACAGAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACACAGAACCCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTTCGGCGCTGGGCGCGGTGGTGTGTCCCGG 180
```

```
Db 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTTCGGCGCTGGGCGCGGTGGTGTGTCCCGG 180
QY 181 AGCGGCGGGCTCGAGGTTCGCGACGTGCACCGTCCCCTACCTACCGCGGATGTGCCGA 240
Db 181 AGCGGCGGGCTCGAGGTTCGCGACGTGCACCGTCCCCTACCTACCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCGGAGGGTCCCAACATCGTCTGTGATCGGCTCGCTGTGATCGGGG 300
Db 241 TCAGAGACCCGGAGGGTCCCAACATCGTCTGTGATCGGCTCGCTGTGATCGGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTCAACG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTCAACG 360
QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAGGGCGCGTTCGCGGAGGCGCGGCTGCTGCTCGCGCAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGGCTTCGTCGAGTGGACTACATGAGAGTGTTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGGCTTCGTCGAGTGGACTACATGAGAGTGTTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
QY 601 TGATGGGCGCCAAATGATGAGCGCGCGGTTCCGCTGCTGCGCAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGATGAGCGCGCGGTTCCGCTGCTGCGCAGGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGTTCGCGCGCGGATTCGACGCGCGGACGT 705
Db 661 TGGCACCGCATGGAGTTCGCGCGCGGATTCGACGCGCGGACGT 705
```

## RESULT 3

```
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
```

```
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACACAGAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACACAGAACCCCGC 120
```



```
QY 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCTGGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCTGGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGCGACGTGACACCGTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGCGACGTGACACCGTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACTCGTCTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACTCGTCTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGCTGTACCG 360
QY 361 ACAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACCAAGGCGCGTTTCGCGGAGGCGCCGGTGTCTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACCAAGGCGCGTTTCGCGGAGGCGCCGGTGTCTCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTGCTCGTCCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
Db 481 GCAGAGTCGAGTACGTGCTCGTCCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
QY 541 TGTGTCTGGTGGCCACCGCATGATCCGCTGTGCGGAGGCGCGCGTGG 600
Db 541 TGTGTCTGGTGGCCACCGCATGATCCGCTGTGCGGAGGCGCGCGTGG 600
QY 601 TGATGGCGCCCAACATCGACGCGCGCGTTCGCTGTGCGGAGGCGCGCGTGG 660
Db 601 TGATGGCGCCCAACATCGACGCGCGCGTTCGCTGTGCGGAGGCGCGCGTGG 660
QY 661 TGGGACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGT 705
Db 661 TGGGACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGT 705
```

## RESULT 6

US-09-285-306-9

```
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-9
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCGAGGACGTGGAGGCGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60

```
Db 1 CCGAGGACGTGGAGGCGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCTGGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCTGGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGCTGGAGTTCGCGACGTGACACCGTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGCGACGTGACACCGTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACTCGTCTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACTCGTCTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGCTGTACCG 360
QY 361 ACAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACCAAGGCGCGTTTCGCGGAGGCGCCGGTGTCTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACCAAGGCGCGTTTCGCGGAGGCGCCGGTGTCTCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTGCTCGTCCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
Db 481 GCAGAGTCGAGTACGTGCTCGTCCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
QY 541 TGTGTCTGGTGGCCACCGCATGATCCGCTGTGCGGAGGCGCGCGTGG 600
Db 541 TGTGTCTGGTGGCCACCGCATGATCCGCTGTGCGGAGGCGCGCGTGG 600
QY 601 TGATGGCGCCCAACATCGACGCGCGCGTTCGCTGTGCGGAGGCGCGCGTGG 660
Db 601 TGATGGCGCCCAACATCGACGCGCGCGTTCGCTGTGCGGAGGCGCGCGTGG 660
QY 661 TGGGACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGT 705
Db 661 TGGGACCGGCATGGAGCTGCGCGCGCGATCGACCGCGGCGT 705
```

## RESULT 7

```
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12
```

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



QY 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCG 60  
Db 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCG 60  
QY 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTATGACACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTATGACACAGAACACCCGC 120  
QY 121 TGTCCGGGCTCAACCAAGCGCCCTGTCCGGCTGTGGCCCGGCTGTGTCCCGGG 180  
Db 121 TGTCCGGGCTCAACCAAGCGCCCTGTCCGGCTGTGGCCCGGCTGTGTCCCGGG 180  
QY 181 AGCGGCGCGGCTGAGGTCGCGAGTCGACCGCTCCACTACCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGAGGTCGCGAGTCGACCGCTCCACTACCGCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGGAGGTCCCAATCGGCTCTGATCGGCTCGCTGTCCGCTGTATGCGCGG 300  
Db 241 TCGAGACCCCGGAGGTCCCAATCGGCTCTGATCGGCTCGCTGTCCGCTGTATGCGCGG 300  
QY 301 TCAACCCGTTCCGCTTCATCGAGACCGCTACCGCAAGGTGTCGACGCGCTGTCACCG 360  
Db 301 TCAACCCGTTCCGCTTCATCGAGACCGCTACCGCAAGGTGTCGACGCGCTGTCACCG 360  
QY 361 AGGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
Db 361 AGGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACAAAGGCGCGTTCCGCGAGCGCGGCTGTGTCGCGCAAGGCGG 480  
Db 421 CGCCGATCGACAAAGGCGCGTTCCGCGAGCGCGGCTGTGTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGTCGCGCGCCAGA 540  
Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGTCGCGCGCCAGA 540  
QY 541 TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGAGCACACGACGCAACCGTCCC 600  
Db 541 TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGAGCAACGACGCAACCGTCCC 600  
QY 601 TGATGGCGCCCAACATGACGCGCAGGCGGTTCCGCTGTGTCGACGAGCGCGCTGG 660  
Db 601 TGATGGCGCCCAACATGACGCGCAGGCGGTTCCGCTGTGTCGACGAGCGCGCTGG 660  
QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705  
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

## RESULT 8

US-09-285-306-13  
; Sequence 13, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 13  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-13

Query Match

100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCG 60  
Db 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCG 60  
QY 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTATGACACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTATGACACAGAACACCCGC 120  
QY 121 TGTCCGGGCTCAACCAAGCGCCCTGTCCGGCTGTGGCCCGGCTGTGTCCCGGG 180  
Db 121 TGTCCGGGCTCAACCAAGCGCCCTGTCCGGCTGTGGCCCGGCTGTGTCCCGGG 180  
QY 181 AGCGGCGCGGCTGAGGTCGCGAGTCGACCGCTCCACTACCGCGGATGTGCCGA 240  
Db 181 AGCGGCGCGGCTGAGGTCGCGAGTCGACCGCTCCACTACCGCGGATGTGCCGA 240  
QY 241 TCGAGACCCCGGAGGTCCCAATCGGCTCTGATCGGCTCGCTGTCCGCTGTATGCGCGG 300  
Db 241 TCGAGACCCCGGAGGTCCCAATCGGCTCTGATCGGCTCGCTGTCCGCTGTATGCGCGG 300  
QY 301 TCAACCCGTTCCGCTTCATCGAGACCGCTACCGCAAGGTGTCGACGCGCTGTCACCG 360  
Db 301 TCAACCCGTTCCGCTTCATCGAGACCGCTACCGCAAGGTGTCGACGCGCTGTCACCG 360  
QY 361 AGGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
Db 361 AGGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420  
QY 421 CGCCGATCGACAAAGGCGCGTTCCGCGAGCGCGGCTGTGTCGCGCAAGGCGG 480  
Db 421 CGCCGATCGACAAAGGCGCGTTCCGCGAGCGCGGCTGTGTCGCGCAAGGCGG 480  
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGTCGCGCGCCAGA 540  
Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGTCGCGCGCCAGA 540  
QY 541 TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGAGCACACGACGCAACCGTCCC 600  
Db 541 TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGAGCAACGACGCAACCGTCCC 600  
QY 601 TGATGGCGCCCAACATGACGCGCAGGCGGTTCCGCTGTGTCGACGAGCGCGCTGG 660  
Db 601 TGATGGCGCCCAACATGACGCGCAGGCGGTTCCGCTGTGTCGACGAGCGCGCTGG 660  
QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705  
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

## RESULT 9

US-09-285-306-14  
; Sequence 14, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 14  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-14

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGATCAACATCGTCCAGTCTGTCGGG 60  
Db 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGATCAACATCGTCCAGTCTGTCGGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTGTCCAGTTCATGACAGAACACCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTGTCCAGTTCATGACAGAACACCGC 120

Qy 121 TGTGGGGCTCACCAACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGTCGGG 180  
Db 121 TGTGGGGCTCACCAACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGTCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGAGCGTGCACCGTCCAGTTCACCTACGGCGGATGTGCCGA 240  
Db 181 AGCGGGCGGGCTGGAGTTCGAGCGTGCACCGTCCAGTTCACCTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTATGCGGG 300  
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTATGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360  
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCGACCGCGGTCGCGAGGACCGCCAGTGGTGGCGAGGCCAACT 420  
Db 361 ACAGATCCACTACTCGACCGCGGTCGCGAGGACCGCCAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGTGGTTCGCGCAAGCGG 480  
Db 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGTGGTTCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAGTGTTCGCGCGGCGCAGA 540  
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAGTGTTCGCGCGGCGCAGA 540

Qy 541 TGGTTCGTTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGC 600  
Db 541 TGGTTCGTTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGC 600

Qy 601 TGATGGCGCCAAACATCGACGCGCGGTCGCTGGTTCGCGAGCGAGCGCGCTGG 660  
Db 601 TGATGGCGCCAAACATCGACGCGCGGTCGCTGGTTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGGACCCGCGATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705  
Db 661 TGGGACCCGCGATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705

## RESULT 10

US-09-285-306-16  
; Sequence 16, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 16  
; LENGTH: 705  
; TYPE: DNA

## i ORGANISM: Mycobacterium avium

US-09-285-306-16

Query Match 100.0%; Score 705; DB 9; Length 705;  
Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGATCAACATCGTCCAGTCTGTCGGG 60  
Db 1 CCCAGGACGTGGAGCGATCACACGACAGCCCTGATCAACATCGTCCAGTCTGTCGGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTGTCCAGTTCATGACAGAACACCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACACGACGAGTGTCCAGTTCATGACAGAACACCGC 120

Qy 121 TGTGGGGCTCACCAACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGTCGGG 180  
Db 121 TGTGGGGCTCACCAACAAGCGCGCTGTGGCGCTGGGCGCGGTGTCTGTCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGAGCGTGCACCGTCCAGTTCACCTACGGCGGATGTGCCGA 240  
Db 181 AGCGGGCGGGCTGGAGTTCGAGCGTGCACCGTCCAGTTCACCTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTATGCGGG 300  
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTATGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360  
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCGACCGCGGTCGCGAGGACCGCCAGTGGTGGCGAGGCCAACT 420  
Db 361 ACAGATCCACTACTCGACCGCGGTCGCGAGGACCGCCAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATTCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGTGGTTCGCGCAAGCGG 480  
Db 421 CGCGATTCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGTGGTTCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAGTGTTCGCGCGGCGCAGA 540  
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGAGTGTTCGCGCGGCGCAGA 540

Qy 541 TGGTTCGTTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGC 600  
Db 541 TGGTTCGTTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGC 600

Qy 601 TGATGGCGCCAAACATCGACGCGCGGTCGCTGGTTCGCGAGCGAGCGCGCTGG 660  
Db 601 TGATGGCGCCAAACATCGACGCGCGGTCGCTGGTTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGGACCCGCGATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705  
Db 661 TGGGACCCGCGATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705

## RESULT 11

US-09-285-306-24  
; Sequence 24, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 24

```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTCGTTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGCCACCGACCGAGCTGTCCAGTTATGAGACAGAACACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGCCACCGACCGAGCTGTCCAGTTATGAGACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCAACAGCGCCCTGTGGGCTGGGCGCTGGGCGGCTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCAACAGCGCCCTGTGGGCTGGGCGCTGGGCGGCTGTCTGCCGG 180
QY 181 AGCGGCGGGCTGGAGGTCCCGACGTGCGACCGCTCCCACTACCGCCGGATGTCCCGGA 240
Db 181 AGCGGCGGGCTGGAGGTCCCGACGTGCGACCGCTCCCACTACCGCCGGATGTCCCGGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGG 300
QY 301 TCACCCCGTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGCGGTGTACCG 360
Db 301 TCACCCCGTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGCGGTGTACCG 360
QY 361 ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCAGCTGTGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCAGCTGTGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGCGCAAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTGAGCACGACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTGAGCACGACGACGCAACCGTGGCC 600
QY 601 TGATGGCGCCAAATGACAGCCGAGGCGGTTCCGCTGGTGGCAGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGACAGCCGAGGCGGTTCCGCTGGTGGCAGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGATCGACGCGCGACGT 705
Db 661 TGGGACCGGCGATGAGCTGCGCGGCGGATCGACGCGCGACGT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTCGTTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTCGTTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGCCACCGACCGAGCTGTCCAGTTATGAGACAGAACACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGCCACCGACCGAGCTGTCCAGTTATGAGACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCAACAGCGCCCTGTGGGCTGGGCGCTGGGCGGCTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCAACAGCGCCCTGTGGGCTGGGCGCTGGGCGGCTGTCTGCCGG 180
QY 181 AGCGGCGGGCTGGAGGTCCCGACGTGCGACCGCTCCCACTACCGCCGGATGTCCCGGA 240
Db 181 AGCGGCGGGCTGGAGGTCCCGACGTGCGACCGCTCCCACTACCGCCGGATGTCCCGGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGCGG 300
QY 301 TCACCCCGTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGCGGTGTACCG 360
Db 301 TCACCCCGTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGTGACGCGGTGTACCG 360
QY 361 ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCAGCTGTGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCCCGCAGGAGGACCGCAGCTGTGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGCGCAAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGCGCAAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGTACATGAGACGTGTCCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTGAGCACGACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTGAGCACGACGACGCAACCGTGGCC 600
QY 601 TGATGGCGCCAAATGACAGCCGAGGCGGTTCCGCTGGTGGCAGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGACAGCCGAGGCGGTTCCGCTGGTGGCAGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGATCGACGCGCGACGT 705
Db 661 TGGGACCGGCGATGAGCTGCGCGGCGGATCGACGCGCGACGT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
```

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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCGCTGTCCCAAGTTTCATGGACCAAGCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCGCTGTCCCAAGTTTCATGGACCAAGCAACCCGC 120
QY 121 TGTGGGGCTCACCAAGCGCGCCCTGTGGGGCTGTGGCGCGTGGCGCGGTGGTGTGTGTCGCGG 180
Db 121 TGTGGGGCTCACCAAGCGCGCCCTGTGGGGCTGTGGCGCGTGGCGCGGTGGTGTGTGTCGCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCCGAGCTGCAACCGTCCCACTACCGCGCGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCCGAGCTGCAACCGTCCCACTACCGCGCGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGTTGTCGCGGG 300
Db 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGTTGTCGCGGG 300
QY 301 TCAACCGGTTGGGTTTCATCGAGACGCGCTGACCGAAGTGTGTGTCGAGCGGTGTCACCG 360
Db 301 TCAACCGGTTGGGTTTCATCGAGACGCGCTGACCGAAGTGTGTGTCGAGCGGTGTCACCG 360
QY 361 ACCAGATCCACTACCTGACCGCGAGAGGACCGCACGTCGTGGCGAGGCCAACT 420
Db 361 ACCAGATCCACTACCTGACCGCGAGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480
QY 481 GCGAGTCCAGTACGTGCCCTGTCCGAGTGAATACATGAGCGTGTGTCGCGCGCGAGA 540
Db 481 GCGAGTCCAGTACGTGCCCTGTCCGAGTGAATACATGAGCGTGTGTCGCGCGCGAGA 540
QY 541 TGGTGTGCGTGGCCACCGGATATCCGTTCTTCGAGCACGACGACGCAACCGTGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATATCCGTTCTTCGAGCACGACGACGCAACCGTGCC 600
QY 601 TGATGGGCGCAACATGCAAGCGCAGCGGTTCCGCTGTGTCGAGCGAGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGCAAGCGCAGCGGTTCCGCTGTGTCGAGCGAGCGCGCGTGG 660
QY 661 TGGGCAACCGCATGAGGCTGGCGCGGCGATCGACCGCGCGAGT 705
Db 661 TGGGCAACCGCATGAGGCTGGCGCGGCGATCGACCGCGCGAGT 705
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RESULT 14

US-09-285-306-11

; Sequence 11, Application US/09285306A

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gigeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11
```

```
Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCGCTGTCCCAAGTTTCATGGACCAAGCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCGCTGTCCCAAGTTTCATGGACCAAGCAACCCGC 120
QY 121 TGTGGGGCTCACCAAGCGCGCCCTGTGGGGCTGTGGCGCGTGGCGCGGTGGTGTGTGTCGCGG 180
Db 121 TGTGGGGCTCACCAAGCGCGCCCTGTGGGGCTGTGGCGCGTGGCGCGGTGGTGTGTGTCGCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCCGAGCTGCAACCGTCCCACTACCGCGCGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCCGAGCTGCAACCGTCCCACTACCGCGCGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGTTGTCGCGGG 300
Db 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGTTGTCGCGGG 300
QY 301 TCAACCGGTTGGGTTTCATCGAGACGCGCTGACCGAAGTGTGTGTCGAGCGGTGTCACCG 360
Db 301 TCAACCGGTTGGGTTTCATCGAGACGCGCTGACCGAAGTGTGTGTCGAGCGGTGTCACCG 360
QY 361 ACCAGATCCACTACCTGACCGCGAGAGGACCGCACGTCGTGGCGAGGCCAACT 420
Db 361 ACCAGATCCACTACCTGACCGCGAGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGCAAGGGCGGTTCCGCGAGGCGCGGTTGCTGTGTCGCGCAAGGCGG 480
QY 481 GCGAGTCCAGTACGTGCCCTGTCCGAGTGAATACATGAGCGTGTGTCGCGCGCGAGA 540
Db 481 GCGAGTCCAGTACGTGCCCTGTCCGAGTGAATACATGAGCGTGTGTCGCGCGCGAGA 540
QY 541 TGGTGTGCGTGGCCACCGGATATCCGTTCTTCGAGCACGACGACGCAACCGTGCC 600
Db 541 TGGTGTGCGTGGCCACCGGATATCCGTTCTTCGAGCACGACGACGCAACCGTGCC 600
QY 601 TGATGGGCGCAACATGCAAGCGCAGCGGTTCCGCTGTGTCGAGCGAGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGCAAGCGCAGCGGTTCCGCTGTGTCGAGCGAGCGCGCGTGG 660
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Db 601 TGATGGCGCCCAACATGACAGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Qy 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGACAGCGCGACGT 705
Db 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGACAGCGCGACGT 705
Db 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGACAGCGCGACGT 705

RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jory
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Qy 61 CGATCAAGAGTTCTTGGCACCAGCAGCTGTCAGTTTCATGACACGACCAACACCCGC 120
Db 61 CGATCAAGAGTTCTTGGCACCAGCAGCTGTCAGTTTCATGACACGACCAACACCCGC 120
Qy 121 TGTGGGGCTCACCCACAGCGCCGCTGTGCGCGTGGCGCGGCTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTGACCCACAGCGCCGCTGTGCGCGTGGCGCGGCTGTCTGTCCCGGG 180
Qy 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCACCCGTCCACTACCGCGGATGTCCCGGA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCACCCGTCCACTACCGCGGATGTCCCGGA 240
Qy 241 TCGAGACCCCGAGGTCCTCCACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGTCCTCCACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
Qy 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGACCGCACCGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGACCGCACCGTGGTGGCGAGGCCAACT 420
Qy 421 CGCCGATCGACAGAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCCCGCAAGCGG 480
Db 421 CGCCGATCGACAGAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCCCGCAAGCGG 480
Qy 481 GCGAGTCCGAGTACGTCCTCGTCGAGGTGACCTACATGACGCTGTCGCGCGCAGA 540
Db 481 GCGAGTCCGAGTACGTCCTCGTCGAGGTGACCTACATGACGCTGTCGCGCGCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGGTGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGGTGCC 600
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Qy 601 TGATGGCGCCCAACATGACAGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACAGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Qy 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGACAGCGCGACGT 705
Db 661 TGGGACCCGCGATGAGCTGCGCGCGCGATGACAGCGCGACGT 705
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Job time : 409.972 secs

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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-8

Perfect score: 705

Sequence: 1 cccagcgagtgaggcgatc.....ggcgatcgagcgagcgatg 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:\*

- 1: /cgm2\_6/ptodata/2/ina/5A\_COMB.seq:\*
- 2: /cgm2\_6/ptodata/2/ina/5B\_COMB.seq:\*
- 3: /cgm2\_6/ptodata/2/ina/6A\_COMB.seq:\*
- 4: /cgm2\_6/ptodata/2/ina/6B\_COMB.seq:\*
- 5: /cgm2\_6/ptodata/2/ina/PCTUS\_COMB.seq:\*
- 6: /cgm2\_6/ptodata/2/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-42	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appli
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

#### ALIGNMENTS

#### RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 8.1e-112;

Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

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Qy 1 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 60
Db 2 CCAGAGCGTGGAGCGATCACACCGCAGACCGTGTATCAACATCCGCGCGGTGGTGGCG 61
Qy 61 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACCCCGC 120
Db 62 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTAGCCCAATTCATGGACCAAGAACCCCGC 121
Qy 121 TGTGGGGCTCACCAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 180
Db 122 TGTGGGGCTTACCAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 181
Qy 181 AGCGGCGCGGCTGGAGTTCGGACGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 182 AGCGTCCGCGGCTGGAGTTCGGACGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 241
Qy 241 TCAGAGACCCCGAGGCTCCCAACATCGGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 300
Db 242 TCAGAACCCCTGAGGGGCCCAACATCGTCTGTATCGGCTCGCTCGCTCGCTCGCTCGG 301
Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGTGTGTGACGCGGTGTACCG 360
Db 302 TCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGCAAGTGTGTGACGCGGTGTAGCG 361
Qy 361 ACCAGATCCACTACCTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAAT 420
Db 362 ACCAGATCGTGTACCTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAAT 421
Qy 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGCTGTGCTCGCGCAAGCGCG 480
Db 422 CGCGGATCGATCGGACGCGTTCGTTTCGAGCGCGCGTGTGCTCGCGCAAGCGCG 481
Qy 481 GCAGGTTCGAGTACGTCCTTCGTCGAGTGTGACTATGAGAGTGTTCGCGCGCGCGCAGA 540
Db 482 GCAGGTTCGAGTACGTCCTTCGTCGAGTGTGACTATGAGAGTGTTCGCGCGCGCGCAGA 541
Qy 541 TGGTTCGCTGGCCACCGCGATGATCCGTTTCGAGCAGCAGCAGCCCAACCGTGGCC 600
Db 542 TGGTTCGCTGGCCACCGCGATGATCCGTTTCGAGCAGCAGCAGCCCAACCGTGGCC 601
Qy 601 TGATGGCGCCAAATGACGCGCGCGTTCGCTGTGGTGTGCGCAGCAGCGCGCGCTGG 660
Db 602 TCATGGGGCAAAATGACGCGCGCGTTCGCTGTGGTGTGCGCAGCAGCGCGCGCTGG 661
Qy 661 TGGGCAACCGGATGGAGTTCGCGCGCGCGATGACGCGCGCGAGT 705
Db 662 TGGGCAACCGGATGGAGTTCGCGCGCGCGATGACGCGCGCGAGT 706
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RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103,840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 3.9e-110;

Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

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Qy 1 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 60
Db 762963 CCAGAGCGTGGAGCGATCACACCGCAGACCGTGTATCAACATCCGCGCGGTGGTGGCG 763022
Qy 61 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACCCCGC 120
Db 763023 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTAGCCCAATTCATGGACCAAGAACCCCGC 763082
Qy 121 TGTGGGGCTCACCAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 180
Db 763083 TGTGGGGCTTACCAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 763142
Qy 181 AGCGGCGCGGCTGGAGTTCGGACGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 763143 AGCGTCCGCGGCTGGAGTTCGGACGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 763202
Qy 241 TCAGAGACCCCGAGGCTCCCAACATCGGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 300
Db 763203 TCAGAACCCCTGAGGGGCCCAACATCGTCTGTATCGGCTCGCTCGCTCGCTCGCTCGG 763262
Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGTGTGTGACGCGGTGTACCG 360
Db 763263 TCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGCAAGTGTGTGACGCGGTGTAGCG 763322
Qy 361 ACCAGATCCACTACCTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAAT 420
Db 763323 ACCAGATCGTGTACCTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAAT 763382
Qy 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGCTGTGCTCGCGCAAGCGCG 480
Db 763383 CGCGGATCGATCGGACGCGTTCGTTTCGAGCGCGCGTGTGCTCGCGCAAGCGCG 763442
Qy 481 GCAGGTTCGAGTACGTCCTTCGTCGAGTGTGACTATGAGAGTGTTCGCGCGCGCGCAGA 540
Db 763443 GCAGGTTCGAGTACGTCCTTCGTCGAGTGTGACTATGAGAGTGTTCGCGCGCGCGCAGA 763502
Qy 541 TGGTTCGCTGGCCACCGCGATGATCCGTTTCGAGCAGCAGCAGCCCAACCGTGGCC 600
Db 763503 TGGTTCGCTGGCCACCGCGATGATCCGTTTCGAGCAGCAGCAGCCCAACCGTGGCC 763562
Qy 601 TGATGGCGCCAAATGACGCGCGCGTTCGCTGTGGTGTGCGCAGCAGCGCGCGCTGG 660
Db 763563 TCATGGGGCAAAATGACGCGCGCGTTCGCTGTGGTGTGCGCAGCAGCGCGCGCTGG 763622
Qy 661 TGGGCAACCGGATGGAGTTCGCGCGCGCGATGACGCGCG 699
Db 763623 TGGGCAACCGGATGGAGTTCGCGCGCGCGATGACGCGCG 763661
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RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:



APPLICANT: FLEISCHMAN, Robert D.  
APPLICANT: WHITE, Owen R.  
APPLICANT: FRASER, Claire M.  
APPLICANT: VENTER, John C.  
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TUBERCULOSIS  
FILE REFERENCE: 24366-20007.00  
CURRENT APPLICATION NUMBER: US/09/103,840A  
CURRENT FILING DATE: 1998-06-24  
NUMBER OF SEQ ID NOS: 2  
SOFTWARE: Patent In Ver. 2.1  
SEQ ID NO 1  
LENGTH: 4411529  
TYPE: DNA  
ORGANISM: Mycobacterium tuberculosis  
OTHER INFORMATION: H37Rv  
US-09-103-840A-1

Query Match 85.5%; Score 603; DB 3; Length 4411529;  
Best Local Similarity 91.4%; Pred. No. 3.9e-110;  
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGGATCAACCGCAGACCCCTGATCAATCGTCCAGTCGTGGCGG 60  
DB 761003 CCCAGGACGTGGAGCGGATCAACCGCAGACCTTGATCAATCGGCGGTGTCGCGG 761062  
QY 61 CGATCAAGGAGTCTTTCGGCACCGCAGCTGTCCAGTTTCATGACCAAGCAACCCCGC 120  
DB 761063 CGATCAAGGAGTCTTTCGGCACCGCAGCTGTCCAGTTTCATGACCAAGCAACCCCGC 761122  
QY 121 TGTGGGGCTCACCACACAGCGCGCTGTGGCGCTGGCGCGGTGCTGTCTCCCGG 180  
DB 761123 TGTGGGGCTCACCACACAGCGCGCTGTGGCGCTGGCGCGGTGCTGTCTCCCGG 761182  
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGCTCCACTACGCGCGGTGTCGCCGA 240  
DB 761183 AGCGTCCGGCTGGAGTCCGCGACGTGCAACCGCTCCACTACGCGCGGTGTCGCCGA 761242  
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGTTCGCTGTGTCGATGCGCGG 300  
DB 761243 TCGAAGCCCTGAGGGGCCCCAATCGTCTGATCGGTTCGCTGTGTCGATGCGCGG 761302  
QY 301 TCAACCCGTCGGGTTCATCGAGACCGCGTACCGAAGGTGTGACGGCGGTGTACCG 360  
DB 761303 TCAACCCGTCGGGTTCATCGAAGCCCGGTACCGAAGGTGTGACGGCGGTGTACCG 761362  
QY 361 ACGAGATCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCCAACT 420  
DB 761363 ACGAGATCGTACTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCCAACT 761422  
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGCGGTGCTGTTCGCGCGCAAGGCGG 480  
DB 761423 CGCCGATCGATCGGACGCGTCTGTCGAGCGCGCGGTGCTGTTCGCGCGCAAGGCGG 761482  
QY 481 CGGAGTGGAGTACGTGCGCTCGTCCGAGTGGATGATGACGCTGTCGCGCGCGAGA 540  
DB 761483 CGGAGTGGAGTACGTGCGCTCGTCCGAGTGGATGATGACGCTGTCGCGCGCGAGA 761542  
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGTGC 600  
DB 761543 TGGTGTGGTGGCCACCGCGATGATTCCTTCCTGAGCAGCAGCAGCAGCAGCAGTGC 761602  
QY 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCGCTGTGTGGCGAGCGCGCGCTGG 660  
DB 761603 TCATGGGCGCAACATGACGCGCCAGGCGGTTCGCTGTGTGGCGAGCGCGCGCTGG 761662  
QY 661 TGGGACCGGCTGAGCTGCGCGCGCGGATCGACGCGG 699  
DB 761663 TGGGACCGGCTGAGCTGCGCGCGCGGATCGACGCGG 761701

RESULT 4  
US-08-313-185-57

; Sequence 57, Application US/08313185  
; Patent No. 5851763  
; GENERAL INFORMATION:  
; APPLICANT: Heym, Beate  
; APPLICANT: Cole, Stewart  
; APPLICANT: Young, Douglas  
; APPLICANT: Zhang, Ying  
; APPLICANT: Honore, Nadine  
; APPLICANT: Telenti, Amalio  
; APPLICANT: Bodmer, Thomas  
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance  
; TITLE OF INVENTION: in Mycobacterium Tuberculosis  
; NUMBER OF SEQUENCES: 66  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
; ADDRESSEE: Dunner  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3315  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/313,185  
; FILING DATE: 12-OCT-1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/POCKET NUMBER: 02356.0068-00000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4000  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ ID NO: 57:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3447 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; US-08-313-185-57

Query Match 79.2%; Score 558.2; DB 2; Length 3447;  
Best Local Similarity 87.4%; Pred. No. 1.7e-101;  
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGGATCAACCGCAGACCCCTGATCAATCGTCCAGTCGTGGCGG 60  
DB 1124 CCCAGGACGTGGAGCGGATCAACCGCAGACCCCTGATCAATCGTCCAGTCGTGGCGG 1183  
QY 61 CGATCAAGGAGTCTTTCGGCACCGCAGCTGTCCAGTTTCATGACCAAGCAACCCCGC 120  
DB 1184 CTATCAAGGAGTCTTTCGGCACCGCAGCTGTCCAGTTTCATGATCAGAACACCCCTC 1243  
QY 121 TGTGGGGCTCACCACAAAGGCGCGCTGTGGCGCTGGCGCGGTGCTGTCTCCCGG 180  
DB 1244 TGTGGGGCTCACCACAAAGGCGCGCTGTGGCGCTGGCGCGGTGCTGTCTCCCGG 1303  
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCGCTCCACTACGCGCGGATGTCGCCGA 240  
DB 1304 AGCGTCCGGCTAGAGTCCGCGACGTGACCGCTTCGACTACGCGCGGATGTCGCCGA 1363  
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGTTCGCTGTGTCGTCGTCGCGG 300  
DB 1364 TCGAGACTCCGAGGGGCGCGAATAGGTTCATGTCGGTTTCATGTCGGTACGCGCGG 1423  
QY 301 TCAACCCGTCGGGTTCATCGAGACCGCGTACCGCAAGCTACCGCAAGTGTGACCGT 360  
DB 1424 TCAACCCCTCGGGTTTCATCGAAGACCCCTACCGCAAGTGTGACCGTGTGTCGCGG 1483



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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db
QY 341 CCCAGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 400
Db
QY 61 CGATCAAGGAGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAAACAACCCGC 120
Db
QY 401 CGATCAAGGAGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAAACAACCCGC 460
QY 121 TGTCGGGCTACCCACAAGCGCGCTGTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCG 180
Db
QY 461 TGTCGGGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGG 520
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGCGCTGACCCGCTCCACTACCGCGCGATGTGCCGA 240
Db
QY 521 AGCGTGGCGGCTGGAGGAGCGCGCTGACCCGCTCCACTACCGCGCGATGTGCCGA 580
QY 241 TCGAGACCCCGGAGGCTCCCAACATCGGCTCGATCGGCTCGGCTCGGCTCGGCTCGGCTCG 300
Db
QY 581 TCGAACCCTTGAGGGGCGCAACATCGGCTCGATCGGCTCGGCTCGGCTCGGCTCGGCTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGT 360
Db
QY 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGT 700
QY 361 ACGAGATCCACTACCTGACCGCGAGAGAGAGCGCGACCGCTGCTGGCTGGCTGGCTGGCT 420
Db
QY 701 ACGAGATCGTGTACTGACCGCGAGAGAGAGCGCGACCGCTGCTGGCTGGCTGGCTGGCT 760
QY 421 CGCCGATCGACAGCAAGGCGCGGTTTCGCGAGAGCGCGGCTGTGTGTGTGTGTGTGTGTGT 480
Db
QY 761 CGCCGATCGATCGGAGCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 820
QY 481 GCGAGGTGAGTACGTGCTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
Db
QY 821 GCGAGGTGAGTACGTGCTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 880
QY 541 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACGACGAC 600
Db
QY 881 TGGTGTGGTGGCCACCGGATGATCCCGTTCTCGAGACGACGACGACGACGACGACGACGAC 940
QY 601 TGATGGGCGCAACATGACGCGCCAGGCGG 630
Db
QY 941 TCATGGGCGCAACATGACGCGCCAGGCGG 970

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RESULT 7
PCT-US95-06790-1
; Sequence 1. Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

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Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db
QY 341 CCCAGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG 400
QY 61 CGATCAAGGAGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAAACAACCCGC 120
Db
QY 401 CGATCAAGGAGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAAACAACCCGC 460
QY 121 TGTCGGGCTACCCACAAGCGCGCTGTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGG 180
Db
QY 461 TGTCGGGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGG 520
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGCGCTGACCCGCTCCACTACCGCGCGATGTGCCGA 240
Db
QY 521 AGCGTGGCGGCTGGAGGAGCGCGCTGACCCGCTCCACTACCGCGCGATGTGCCGA 580
QY 241 TCGAGACCCCGGAGGCTCCCAACATCGGCTCGATCGGCTCGGCTCGGCTCGGCTCGGCTCG 300
Db
QY 581 TCGAACCCTTGAGGGGCGCAACATCGGCTCGATCGGCTCGGCTCGGCTCGGCTCGGCTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGT 360
Db
QY 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGCAAGGTGTGTGTGTGTGTGTGTGTGT 700
QY 361 ACGAGATCCACTACCTGACCCGCGAGAGAGAGCGCGACCGCTGCTGGCTGGCTGGCTGG 420

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Db 701 ACAGATCGTGTACCTGACCGCGACGAGGAGGACCGCACAGTGGTGCGACAGGCCAAAT 760  
Qy 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480  
Db 761 CGCCGATCGATGCGGACGCGTTCGTCGAGCGCGCGTCTGGTCCGCGCAAGCGG 820  
Qy 481 GCAGGTCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGAGTGTTCGCGCGCCAGA 540  
Db 821 GCAGGTCGAGTACGTCGCCCTCGTCTGAGTGGACTACATGGAGTGTTCGCGCGCCAGA 880  
Qy 541 TGGTTCGTCGTCGCGACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCGCGTCC 600  
Db 881 TGGTTCGTCGTCGCGACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCGCGTCC 940  
Qy 601 TGATGGCGCGCAACATGACGCGCGCGG 630  
Db 941 TCATGGGGGCAACATGACGCGCGCGG 970

## RESULT 8

US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
Qy 36 ATCAACATCCGTCAGTCGTCGCGCGATCAAGAGTTCTTCGCGACAGCGCGTCTCC 95  
Db 1 ATCAACATCCGCGCGTGTTCGCGCGATCAAGAGTTCTTCGCGACAGCGCGTCTGAGC 60  
Qy 96 CAGTTTCATGGACAGAAACCCGTCGCGGCTCACCACAGCGCGCGTCTCGCG 155  
Db 61 CAATTTCATGGACAGAAACCCGTCGCGGTTGACCCCAAGCGCGCGTCTCGCGC 120

Qy 156 CTGGGCGCGGTGTGTCTGTCCTCCGCGAGCGCGCGCTGGAGTCCCGCGACGTGCACCCG 215  
Db 121 CTGGGCGCGGTGTGTCTGTCACGTGAGCGTCCGCGGCTGGAGTCCCGCGACGTGCACCCG 180  
Qy 216 TCCACTACCGCGCGAGTGTCCCGATCGAGACCCCGAGGTTCCAAACATCGGTCATC 275  
Db 181 TCGCACTACCGCGCGAGTGTCCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCATC 240  
Qy 276 GGCTCGTGTCTGTCGTCGTCGCGGTCACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335  
Db 241 GGCTCGTGTCTGTCGTCGTCGCGGTCACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 300  
Qy 336 AAGTGTGTCTGACGCGCGTGTCCAGACGAGATCCACTACCTGACCGCGCGACGAGGAGAC 395  
Db 301 AAGTGTGTCTGACGCGCGTGTTCGAGCAGATCGTGTACCTGACCGCGCGAGGAGAC 360  
Qy 396 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGACACAGGGCCGGTTCGCGAGGCGC 455  
Db 361 CGCCACGTGTGCGCAGGCGCAATTCCCGATCGATCGGACGCGTTCGTCGAGCGC 420  
Qy 456 CGGTGTGTCTGTCGCGCGCAAGGCGGAGGTTCGAGTACGTGCCCTCGTCGAGGTGAC 515  
Db 421 CGGTGTGTCTGTCGCGCGCAAGGCGGAGGTTCGAGTACGTGCCCTCGTCGAGGTGAC 480  
Qy 516 TACATGACGTGTCTGCGCGCGCGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCTC 575  
Db 481 TACATGACGTGTCTGCGCGCGCGATGTTGTCGGTGGCCACCGCGATGATTCCTCTC 540  
Qy 576 GAGCAGCAGCAGCGCAACCGTGCCTGATGGGCCCAACATGAGCGCGCGCGGTTCCG 635  
Db 541 GAGCAGCAGCAGCGCAACCGTGCCTCATGGGGGCAACATGAGCGCGCGGTTCCG 600  
Qy 636 CTGTCGCGCAGCGAGGCGC 655  
Db 601 CTGTCGTCGTCGAGGCGCC 620

## RESULT 9

US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCTGTGGCGGCATCAAGAGTCTTTCGGCACACGACAGTGTGCC 95
Db 620 ATCAACATCCGGCCGGTGTGCGCGCATCAAGAGTCTTTCGGCACACGACAGTGTGAGC 561

QY 96 CAGTTTCATGACCAGAAACACCCCGCTGTCCGGGCTCACCCACAAGCGCGCTGTGCGCG 155
Db 560 CAATTTCATGACCAGAACACCCCGCTGTCCGGGTTGACCCACAAGCGCGCACTGTGCGCG 501

QY 156 CTGGGCCCGGGTGTCTGTCCGGAGCGGGCCGGGCTGAGGTCCCGAGCTGCACCCG 215
Db 500 CTGGGGCCCGCGGCTCTGTCACTGAGCGTGCGGGCTGGAGGTCCCGACGTCACCCG 441

QY 216 TCCCACTACGCGCGGATGCCCCGATCGAGACCCCGGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY 276 GGCTCGTCTCGGTGTATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCGC 335
Db 380 GGCTCGTCTCGGTGTACGCGGGTCAAACCCGTTTCGGGTTTCAGAAACGCCGTACCGC 321

QY 336 AAGTGTGTACGGCGTGTCTACCGAGATCCACTCTGTACCGCGCAGAGGAGGAC 395
Db 320 AAGTGTGTACGGCGTGTGTAGCGAGAGTCTGTACTGTACCGCGCAGAGGAGGAC 261

QY 396 CGCCACGTGTGTGGCGGACGCCAACTCCCGCATCGAACACAGGCGCGGTTCGCGAGGCC 455
Db 260 CGCCACGTGTGTGGCACAGGCCAATTCCCGCATGATCGGACGGTTCGCTCGTGCAGCCG 201

QY 456 CGGGTGTGTGTCCGCGCAAGGGCGGGCGAGTCTGAGTACGTGCCCTCGTCCGAGGTGCAC 515
Db 200 CGCGTGTGTGTCCGCGCAAGCGGGCGAGTGGAGTACGTGCCCTCGTCTGAGGTGCAC 141

QY 516 TACATGACGTGTGCGCGCGCGAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 140 TAGATGACGTCTCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 81

QY 576 GAGCACGACACGCCAACCGTGCCTCATGCGGGGCCAACATGACGCGCCAGGCGGTTCG 635
Db 80 GAGCACGACGCGCAACCGTGCCTCATGCGGGGCCAACATGACGCGCCAGGCGGTTCG 21

QY 636 CTGGTGGCAGCGAGCGCC 655
Db 20 CTGGTCCGTAGCGAGCCCC 1

```

RESULT 10	
US-08-520-946-135	
; Sequence 135, Application US/08520946	
; Patent No. 6372424	
; GENERAL INFORMATION:	
; APPLICANT: BROW, MARY ANN D.	
; APPLICANT: LYAMICHEV, VICTOR I.	
; APPLICANT: OLIVE, DAVID M.	
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF	
; TITLE OF INVENTION: PATHOGENS	
; NUMBER OF SEQUENCES: 160	
; CORRESPONDENCE ADDRESS:	
; ADDRESSEE: MEDLEN & CARROLL	
; STREET: 220 MONTGOMERY STREET, SUITE 2200	
; CITY: SAN FRANCISCO	
; STATE: CALIFORNIA	

361	CGCCACGCTGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGCTCGCTTCGTGAGCGC	420
456	CGGGTGCTGGTCCGCCGCAAGCGGGCGAGTCAAGTACGTGCGCCCTCGTCCGAGGTGCAC	515
421	CGCGTGCTGGTCCGCCGCAAGCGGGCGAGTACGTGCGTCCCTCGTCTGAGGTGCAC	480
516	TACATGGACGCTGTCGCCGCGCCAGATGCTGTCGTGGCCACCGGATGATCCCGTTCCCT	575
481	TACATGGACGCTCTCGCCCGCCAGATGCTGTCGTGGCCACCGGATGATCCCTTCCTG	540
576	GAGCACGACGACGCCAACCGTCGCTGATGGCGCCCAACATGACGCGCCAGGCGGTTCCG	635
541	GAGCACGACGACGCCAACCGTGCCTCATGGGGGCAAAATGACAGCCAGGCGGTCCCG	600
636	CTGGTGCGCAGCGAGCGCC	655

Db 601 CTGGTCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGATCAAGGAGTTCTTCGGCACCGCAGCTGTC 95

Db 620 ATCAACATCCGGCCGGTGGTCGCCGATCAAGGAGTTCTTCGGCACCGCAGCTGAGC 561

Qy 96 CAGTTATGACACAGAACAAACCCGCTGTCCGGGGTCAACCAAGCGCGCTTCGGCG 155

Db 560 CAATTCATGACACAGAACAAACCCGCTGTCCGGGGTCAACCAAGCGCGCTTCGGCG 501

Qy 156 CTGGGCCCGGTGTGTCTGTCTCCGGAGCGGGCTGAGAGTCCGGACGTGCACCG 215

Db 500 CTGGGCCCGGGCTGTCTGTCTGTCTCCGGAGCGGGCTGAGAGTCCGGACGTGCACCG 441

Qy 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCGGAGGTCCCAACATCGGTCTGTC 275

Db 440 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGTC 381

Qy 276 GGCTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCGCTACCGC 335

Db 380 GGCTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCGCTACCGC 321

Qy 336 AAGTGTGTGACGCGCGGTGTACCGACGAGATCCACTGACCGCGCGGACGAGGAGAC 395

Db 320 AAGTGTGTGACGCGCGGTGTAGCGACGAGATCGTGTACTGACCGCGCGGACGAGGAGAC 261

Qy 396 CGCACGTGTGGCGCAGGCCAACTCGCCGATCGAGACAAAGGCGCGTTTCGGCGAGGCC 455

Db 260 CGCACGTGTGGCGCAGGCCAACTTCGCCGATCGATCGGACGGTTCGCTTCGTCGAGCCG 201

Qy 456 CGGTCGTGTCTCGCCCGCAGAGCGGGGAGGTGCGCTCGCCCTCGTCGAGGTGGAC 515

Db 200 CGGTCGTGTCTCGCCCGCAGAGCGGGGAGGTGAGTACGTGCCCTCGTCGAGGTGGAC 141

Qy 516 TACATGAGCGTGTGGCGCGCCAGATGTTGCGTGGCCACCGGATGATCCGTTCTCTC 575

Db 140 TACATGAGCGTGTGGCGCGCCAGATGTTGCGTGGCCACCGGATGATTCCTCTCTG 81

Qy 576 GAGCAGCAGCAGCCCAACCGTGCCTGATGGCGCCCAACATGAGCGCGCAGGGGTTCCG 635

Db 80 GAGCAGCAGCAGCCCAACCGTGCCTGATGGCGCCCAACATGAGCGCGCAGGGGTTCCG 21

Qy 636 CTGGTCGCGCAGCGAGGCC 655

Db 20 CTGGTCGCTAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655.378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGATCAAGGAGTTCTTCGGCACCGCAGCTGTC 95

Db 1 ATCAACATCCGGCCGGTGGTCGCCGATCAAGGAGTTCTTCGGCACCGCAGCTGAGC 60

QY 96 CAGTTCATGGACCAAGACCAACCGCTGTGCGGGCTCACCACAAAGCGCGCTGTGCGGG 155  
Db 61 CAATTCATGGACCAAGACCAACCGCTGTGCGGGTTGACCCAAAGCGCGCTGTGCGGG 120  
QY 156 CTGGCCCGGGTGTGTCTGCTCCCGGAGCGGGCGGGCTGGAGTCCGGACGTGCACCGG 215  
Db 121 CTGGGGCCGGGGTGTGTCTGCTGAGCGGTGCGGGCTGGAGTCCGGACGTGCACCGG 180  
QY 216 TCCCACTACGGCCGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGGCCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTGCTGTATGCGGGGTCAACCGTTGCGGGTTTCATCGAGACGCGTACCGC 335  
Db 241 GGCTCGCTGTGCTGTATGCGGGGTCAACCGTTGCGGGTTTCATCGAAACGCGTACCGC 300  
QY 336 AAGGTGTGTGCGCGGTGTGTGCTGACCGAGATCCACTACTGACCGCGACGAGGAGGAC 395  
Db 301 AAGGTGTGTGCGCGGTGTGTGCTGACCGAGATCGTGTACCTGACCGCGACGAGGAGGAC 360  
QY 396 CGCCACGTGTGCGCGAGCGCAACTGCGCGATCGACGACAAAGGGCGGTTCGCGAGGCC 455  
Db 361 CGCCACGTGTGCGCGAGCGCAACTGCGCGATCGATGCGGACGCTCGCTTCGTGAGCGG 420  
QY 456 CGGGTGTGTGCGCGAGCGCAACTGCGCGATCGACGACAAAGGGCGGTTCGCGAGGCC 515  
Db 421 CGGTGTGTGCGCGAGCGCAACTGCGCGATCGATGCGGACGCTCGCTTCGTGAGTGGAC 480  
QY 516 TACATGACGTGTGCGCGAGCGCAACTGCGCGATGCTGCGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 481 TACATGACGTGTGCGCGAGCGCAACTGCGCGATGCTGCGTGGCCACCGCGATGATCCCGTTCCTC 540  
QY 576 GAGCAGCAGCGCCCAACCGTCCCTGATGGCGCCCAACATGACGCGCCAGCGGTTCGG 635  
Db 541 GAGCAGCAGCGCCCAACCGTCCCTGATGGCGCCCAACATGACGCGCCAGCGGTTCGG 600  
QY 636 CTGGTGGCAGCGAGGCGCC 655  
Db 601 CTGGTGGCAGCGAGGCGCC 620

## RESULT 13

US-09-655-378A-138/c  
; Sequence 138, Application US/09655378A  
; Patent No. 6673616  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; OLIVE, DAVID M.  
; LYAMICHEV, VICTOR I.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; MEDIUM TYPE: Floppy disk  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; FILING DATE: 05-Sep-2000  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:  
US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCCGTCCAGTCTGTGCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGATCC 95  
Db 620 ATCAACATCCCGTCCAGTCTGTGCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGATCC 561  
QY 96 CAGTTTCATGACCAAGAACACCCGCTGTGCGGGCTCACCCACAAGCGCGCTGTGCGGG 155  
Db 560 CAATTCATGACCAAGAACACCCGCTGTGCGGGTTGACCCACAAGCGCGCTGTGCGGG 501  
QY 156 CTGGCCCGGGTGTGTCTGTCCCGGAGCGGGCTGGAGTCCGCGACGTGACCGG 215  
Db 500 CTGGGGCCCGGGTGTGTCTGTGACGTGAGCGTGTGCGGGCTGGAGTCCGCGACGTGACCGG 441  
QY 216 TCCCACTACGCGCGGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 440 TCGCACTACGCGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381  
QY 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGCTTCGGGTTTCATCGAGACGCGCTACCGC 335  
Db 380 GGCTCGCTGTGCTGTATGCGCGGTCAACCGCTTCGGGTTTCATCGAAACGCGCTACCGC 321  
QY 336 AAGTGTGTGCGCGGTGTGTGCGCGATGCCATGCCATGCCATGCCATGCCATGCCATGCC 395  
Db 320 AAGTGTGTGCGCGGTGTGTGCGCGATGCCATGCCATGCCATGCCATGCCATGCCATGCC 261  
QY 396 CGCCACGTGTGCGCGAGCGCAACTCGCGGATCGAGACAAAGGGCGGTTCGCGAGGCC 455  
Db 260 CGCCACGTGTGCGCGAGCGCAACTCGCGGATCGAGACAAAGGGCGGTTCGCTCGAGCGG 201  
QY 456 CGGGTGTGTGCTCCCGCGCAAGCGCGGAGGTTCAGTACGTGCGCTCGCTCGAGGTGGAC 515  
Db 200 CGGTGTGTGCTCCCGCGCAAGCGCGGAGGTTCAGTACGTGCGCTCGCTCGAGGTGGAC 141  
QY 516 TACATGACGTGTGCGCGCGCGATGCTGCGGTGCGCGACCGCGATGATCCCGTTCCTC 575  
Db 140 TACATGACGTGTGCGCGCGCGATGCTGCGGTGCGCGACCGCGATGATTCCTTCCTG 81  
QY 576 GAGCAGCAGCAGCGCCACCGTGCCTGATGGCGCCCAACATGACGCGCAGCGGTTCG 635  
Db 80 GAGCAGCAGCAGCGCCACCGTGCCTGATGGCGCCCAACATGACGCGCAGCGGTTCG 61  
QY 636 CTGGTGGCGAGCGAGGCGCC 655  
Db 20 CTGGTGGCGAGCGAGGCGCC 1

## RESULT 14

US-08-757-653-136  
; Sequence 136, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; THERMOSTABLE FEN-1 ENDONUCLEASES  
; NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGCGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60
QY 96 CAGTTATGACCAAGAACAAACCCGCTGTGCGGGGTCAACCAAGAGCGCCGCTGTGCGG 155
DB 61 CAATTATGACCAAGAACAAACCCGCTGTGCGGGTTGACCTACAAGCGCCGACTGTGCGG 120
QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGAGGTTCCGCGACGTCACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGAGGTTCCGCGACGTCACCCG 180
QY 216 TCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGGTGTGCGGTGTGATGCGCGGTCAACCCGTTCCGCTTCGCGGTTTCATCGAGACCGGTTCCG 335

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGCGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60
QY 96 CAGTTATGACCAAGAACAAACCCGCTGTGCGGGGTCAACCAAGAGCGCCGCTGTGCGG 155
DB 61 CAATTATGACCAAGAACAAACCCGCTGTGCGGGTTGACCTACAAGCGCCGACTGTGCGG 120
QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGAGGTTCCGCGACGTCACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGAGGTTCCGCGACGTCACCCG 180
QY 216 TCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGGTGTGCGGTGTGATGCGCGGTCAACCCGTTCCGCTTCGCGGTTTCATCGAGACCGGTTCCG 335
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```

Db 241 GGCCTGCTGCTGCTACGCGGGGTCAACCGTTTCGGTTTCATCGAAACGCCGTACCGC 300
QY 336 AAGGTGGTTCGACGGCGTGGTCAACCGAGATCCACTACCTGACCGCCGACGAGGAGGAC 395
Db 301 AAGGTGGTTCGACGGCGTGGTTAGCGACGAGATCGTGTACTCTGACCGCCGACGAGGAGGAC 360
QY 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGGCCGGTTCCGGAGGCC 455
Db 361 CGCCACGTGGTGGCACAGGCCAATTCCGCCGATCGATGCGGACGGTCGCTTCGAGCCG 420
QY 456 CGGGTGTCTGGTCCGCCGAAGCGGGCGAGGTTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db 421 CGCGTGTCTGGTCCGCCGAAGCGGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY 516 TACATGGACGTGTCCGCCGCCGAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCCTC 575
Db 481 TACATGGACGTGTCCGCCGCCGAGATGGTGTGGTGGCCACCGCGATGATCCCTTCCTG 540
QY 576 GAGCACGACGACGCCAACCGTGCCCTGATGGCGGCCAACATGACGCGCCAGCGGTTCCG 635
Db 541 GAGCACGACGACGCCAACCGTGCCCTCATGGGGGCAACATGACGCGCCAGCGGTGCCG 600
QY 636 CTGTGCGCAGCGAGGCC 655
Db 601 CTGTGCGTAGCGAGGCC 620

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Search completed: August 19, 2004, 14:46:02  
 Job time : 81.446 secs

**This Page Blank (uspto)**

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds

(without alignments)  
8488.468 Million cell updates/sec

Title: US-09-285-306-8

Perfect score: 705

Sequence: 1 cccaggacgtggaggcgtc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:\*

- 1: /cgn2\_6/ptodata/1/pubna/US07\_PUBCOMB.seq.\*
- 2: /cgn2\_6/ptodata/1/pubna/PCT\_NEW\_PUB.seq.\*
- 3: /cgn2\_6/ptodata/1/pubna/US06\_NEW\_PUB.seq.\*
- 4: /cgn2\_6/ptodata/1/pubna/US06\_PUBCOMB.seq.\*
- 5: /cgn2\_6/ptodata/1/pubna/US07\_NEW\_PUB.seq.\*
- 6: /cgn2\_6/ptodata/1/pubna/PCTUS\_PUBCOMB.seq.\*
- 7: /cgn2\_6/ptodata/1/pubna/US08\_NEW\_PUB.seq.\*
- 8: /cgn2\_6/ptodata/1/pubna/US08\_PUBCOMB.seq.\*
- 9: /cgn2\_6/ptodata/1/pubna/US09A\_PUBCOMB.seq.\*
- 10: /cgn2\_6/ptodata/1/pubna/US09B\_PUBCOMB.seq.\*
- 11: /cgn2\_6/ptodata/1/pubna/US09C\_PUBCOMB.seq.\*
- 12: /cgn2\_6/ptodata/1/pubna/US09\_NEW\_PUB.seq.\*
- 13: /cgn2\_6/ptodata/1/pubna/US09\_NEW\_PUB.seq.\*
- 14: /cgn2\_6/ptodata/1/pubna/US10A\_PUBCOMB.seq.\*
- 15: /cgn2\_6/ptodata/1/pubna/US10B\_PUBCOMB.seq.\*
- 16: /cgn2\_6/ptodata/1/pubna/US10C\_PUBCOMB.seq.\*
- 17: /cgn2\_6/ptodata/1/pubna/US10\_NEW\_PUB.seq.\*
- 18: /cgn2\_6/ptodata/1/pubna/US60\_NEW\_PUB.seq.\*
- 19: /cgn2\_6/ptodata/1/pubna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	US-09-285-306-4	Sequence 4, Appli
2	705	100.0	705	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	US-09-285-306-12	Sequence 12, Appli
8	705	100.0	705	US-09-285-306-13	Sequence 13, Appli
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appli
10	705	100.0	705	US-09-285-306-16	Sequence 16, Appli
11	705	100.0	705	US-09-285-306-17	Sequence 17, Appli
12	703.4	99.8	705	US-09-285-306-24	Sequence 24, Appli
13	695	98.6	705	US-09-285-306-3	Sequence 3, Appli
14	693.4	98.4	705	US-09-285-306-11	Sequence 11, Appli

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appl
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appl
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appl
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appl
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appl
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appl
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appl
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appl
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appl
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appl
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

#### ALIGNMENTS

RESULT 1  
US-09-285-306-4  
; Sequence 4, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-4

Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 2.1e-154;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60		
Db	1	CCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60		
QY	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGCCAGTTCATGCACCAACACCCGC 120		
Db	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGCCAGTTCATGCACCAACACCCGC 120		
QY	121	TGTCCGGGCTCACCCACAAGCCGCCCTGTGGCGCTGGCCCGGTGGTCTGTCCCGGG 180		
Db	121	TGTCCGGGCTCACCCACAAGCCGCCCTGTGGCGCTGGCCCGGTGGTCTGTCCCGGG 180		

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QY 181 AGCGGGCGGGCTGAGGTCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGAGGTCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCCGGAGGTGCCCAACATCGGTCTGTATCGGCTCGCTGTCTCGTGTATGCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTGCCCAACATCGGTCTGTATCGGCTCGCTGTCTCGTGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
QY 361 ACCAGATCCACTACCTACCGCGACGAGGAGGACGCCACGTGTTGGCGCAGGCCAACT 420
Db 361 ACCAGATCCACTACCTACCGCGACGAGGAGGACGCCACGTGTTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGGTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGGTGCTGGTCCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCCGA 540
Db 481 GCAGAGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCCGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCC 600
QY 601 TGATGGCGCGCAACATCGACGCGCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATCGACGCGCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCGAGCT 705
Db 661 TGGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCGAGCT 705
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## RESULT 2

US-09-285-306-5

; Sequence 5, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 5

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-5

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 CCAGAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGCGG 60
Db 1 CCAGAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCGACGAGTCGCCAGTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCGACGAGTCGCCAGTTCATGGACCAAGAACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTCCCGGG 180
```

```
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGAGGTCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGAGGTCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCCGGAGGTGCCCAACATCGGTCTGTATCGGCTCGCTGTCTCGTGTATGCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTGCCCAACATCGGTCTGTATCGGCTCGCTGTCTCGTGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
QY 361 ACCAGATCCACTACCTACCGCGACGAGGAGGACGCCACGTGTTGGCGCAGGCCAACT 420
Db 361 ACCAGATCCACTACCTACCGCGACGAGGAGGACGCCACGTGTTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGGTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGGTGCTGGTCCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCCGA 540
Db 481 GCAGAGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGAGACGTGTGCGCGCGCCGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCGCCAAACCGTGCC 600
QY 601 TGATGGCGCGCAACATCGACGCGCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATCGACGCGCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCGAGCT 705
Db 661 TGGGCACCGCATGGAGCTCGCGCGCGCATCGACCGCGCGAGCT 705
```

## RESULT 3

US-09-285-306-6

; Sequence 6, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 6

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-6

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 CCAGAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGCGG 60
Db 1 CCAGAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCGACGAGTCGCCAGTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCGACGAGTCGCCAGTTCATGGACCAAGAACCCGC 120
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121	TGTCGGGGCTCA	CCCA	CAAGCGCGCTGT	CGCGCTGGGCCCGGGTGGTGTGTGCCGGG	180	
121	TGTTCGGGGCTCA	CCCA	CAAGCGCGCGCTGT	CGCGCTGGGCCCGGGTGGTGTGTGCCGGG	180	
181	AGCGGGCGGGCTGG	AGGTCCG	GACGTGCAC	CCGTCCTCCACTACGGCCGGATGTGCCCGA	240	
181	AGCGGGCGGGCTGG	AGGTCCG	GACGTGCAC	CCGTCCTCCACTACGGCCGGATGTGCCCGA	240	
241	TCGAGACCCCGGAG	GGTCCCA	CATCGCTCTGAT	CGGCTCGCTGCTGTGATGCGCGGG	300	
241	TCGAGACCCCGGAG	GGTCCCA	CATCGCTCTGAT	CGGCTCGCTGCTGTGATGCGCGGG	300	
301	TCAACCCGCTTCGG	GTTCAT	CGAGACGCCGTA	CCGGAAGTGGTGCACGGCGTGTGCACCG	360	
301	TCAACCCGCTTCGG	GTTCAT	CGAGACGCCGTA	CCGGAAGTGGTGCACGGCGTGTGCACCG	360	
361	ACGAGATCCACTAC	CTACCTGAC	CGCGACGAGGAG	CCGCCACGTGGTGGCGCAGGCCCACT	420	
361	ACGAGATCCACTAC	CTACCTGAC	CGCGACGAGGAG	CCGCCACGTGGTGGCGCAGGCCCACT	420	
421	CGCCGATCGACGAC	AAGGGCGGTT	TCGCGAGAGGCC	CGGGTCTGTCTCGCGCGCAAGCGGG	480	
421	CGCCGATCGACGAC	AAGGGCGGTT	TCGCGAGAGGCC	CGGGTCTGTCTCGCGCGCAAGCGGG	480	
481	GCAGGTCGAGTAGT	AGTGCCCT	TCGTCGAGGTGGA	CTACATGGA	CGTGTGCGCGCGCCAGA	540
481	GCAGGTCGAGTAGT	AGTGCCCT	TCGTCGAGGTGGA	CTACATGGA	CGTGTGCGCGCGCCAGA	540
541	TGCTGTCTGGTGGC	ACCGCGATGAT	CCGTTTCCT	TCGACGACGACGCCAACCGTGCC	600	
541	TGCTGTCTGGTGGC	ACCGCGATGAT	CCGTTTCCT	TCGACGACGACGCCAACCGTGCC	600	
601	TGATGGGCGCCAA	CATCAGCGCC	CAGGCGGTT	TCGCTGGTGGCAGCGAGGCGCGCTGG	660	
601	TGATGGGCGCCAA	CATCAGCGCC	CAGGCGGTT	TCGCTGGTGGCAGCGAGGCGCGCTGG	660	
661	TGGGACCCGCATGG	AGGTGCG	CGCGCAT	TCGACGCGGCGACGT	705	
661	TGGGACCCGCATGG	AGGTGCG	CGCGCAT	TCGACGCGGCGACGT	705	

## RESULT 4

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US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```

Query Match	100.0.0;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0.0;	Pred. No. 2.1e-154;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCGAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCAGTCGTGGCGG	60	
Db	1	CCGAGACGTGGAGGCGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCAGTCGTGGCGG	60	
QY	61	CGATCAAGGAGGTTCTTCGGCACACGCGCAGCTGTCCAGTTTCATGGACACAGAAACACCCG	120	

61	CGATCAAGAGTTC	TTCCGCACAGCAGCTGTCCAGTTCATGGACAGAACACCCGC	120
121	TGTCGGGGTCA	CCCAACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTC	180
121	TGTCGGGGCT	CACCAACAAGCGCGCTGTTCGGCGCTGGGCCCGGGTGTCTGTC	180
181	AGCGGCGCGGCT	GGAGGTCCGCGACGTGCACCGCTCCCACTACGGCGCGATGTGCCGA	240
181	AGCGGCGCGGCT	GGAGGTCCGCGACGTGCACCGCTCCCACTACGGCGCGATGTGCCGA	240
241	TCGAGACCCCG	GAGGGTCCCAACATCGTCTGTATCGGCTCGCTCTCGGTGTATCGCGGG	300
241	TCGAGACCCCG	GAGGGTCCCAACATCGTCTGTATCGGCTCGCTCTCGGTGTATCGCGGG	300
301	TCAACCCGTT	TCGGGTTTCATCGACGCGCTACCGCAAGTGGTTCGACGGCGTGTCA	360
301	TCAACCCGTT	TCGGGTTTCATCGACGCGCTACCGCAAGTGGTTCGACGGCGTGTCA	360
361	ACGAGATC	CACTACGACCGCGACGAGAGGACCGCCAGTGGTGGCGAGGCGCACT	420
361	ACGAGATC	CACTACCTGACCGCGCGACGAGAGGACCGCCAGTGGTGGCGAGGCGCACT	420
421	CGCGCAT	CGACGAAGGGCGGTTCCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG	480
421	CGCGCAT	CGACGAAGGGCGGTTCCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG	480
481	GCAGGTC	CGAGTACGTGCGCTCTCTCGAGGTGGACTACATGGACGTGTGCGCGCGCAGA	540
481	GCAGGTC	CGAGTACGTGCGCTCTCTCGAGGTGGACTACATGGACGTGTGCGCGCGCAGA	540
541	TGCTGT	CGGTGGCCACCGCATGATCCGTTCTCTCGAGCAGCAGCGCAACCGTGCC	600
541	TGCTGT	CGGTGGCCACCGCATGATCCGTTCTCTCGAGCAGCAGCGCAACCGTGCC	600
601	TGATGG	CGCCCAACATGCAGCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGTGG	660
601	TGATGG	CGCCCAACATGCAGCGCCAGCGGTTCCGCTGTGTCGACGAGCGCGCGTGG	660
661	TGGGCA	CCGCGATGGAGTCCGCGCGCGATGCACGCGCGACGT	705
661	TGGGCA	CCGCGATGGAGTCCGCGCGCGATGCACGCGCGACGT	705

## RESULT, T 5

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US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570DS
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

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	Query Match	100.0%;	Score 705;	DB 9;	Length 705;
	Best Local Similarity	100.0%;	Pred. No. 2.le-154;		
	Matches 705;	Conservative	0;	Mismatches	0; Gaps 0;
QY	1	CCGAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG	60		
Db	1	CCGAGGACGTGGAGGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG	60		

QY 61 CGATCAAGGAGTTCTTTCGGACCAAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACCAAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120  
QY 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTCCGGCTTGGGCCCGGGTGTCTGTCCCGGG 180  
Db 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTCCGGCTTGGGCCCGGGTGTCTGTCCCGGG 180  
QY 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
Db 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
QY 241 TCAGAGACCCCGGGTTCACCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATTCGCGGG 300  
Db 241 TCAGAGACCCCGGGTTCACCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATTCGCGGG 300  
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTTCACCG 360  
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTTCACCG 360  
QY 361 ACAGATTCCTACTACCTGACCGCGAGAGGAGACCGCCACGTTGGTGGCCAGGCCAACT 420  
Db 361 ACAGATTCCTACTACCTGACCGCGAGAGGAGACCGCCACGTTGGTGGCCAGGCCAACT 420  
QY 421 CGCGGATCGAGACGACGAGGCGGTTCCGCGAGGCGCGGTTGCTGTCCGCGCAAGCGGG 480  
Db 421 CGCGGATCGAGACGACGAGGCGGTTCCGCGAGGCGCGGTTGCTGTCCGCGCAAGCGGG 480  
QY 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGCTGTCCCGCGCCAGA 540  
Db 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGCTGTCCCGCGCCAGA 540  
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCC 600  
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCC 600  
QY 601 TGATGGCGCCAAACATCGACGCGCAGCGCTTCGCTGGTGGCCAGGCGCGCGCTGG 660  
Db 601 TGATGGCGCCAAACATCGACGCGCAGCGCTTCGCTGGTGGCCAGGCGCGCGCTGG 660  
QY 661 TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACGCGCGGAGCT 705  
Db 661 TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACGCGCGGAGCT 705

## RESULT 6

US-09-285-306-9

; Sequence 9, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 9

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154; Indels 0; Gaps 0;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTTCCAGTCGTGGCGG 60

Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTTCCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTTCTTTCGGACCAAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120  
Db 61 CGATCAAGGAGTTCTTTCGGACCAAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120  
QY 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTCCGGCTTGGGCCCGGGTGTCTGTCCCGGG 180  
Db 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTCCGGCTTGGGCCCGGGTGTCTGTCCCGGG 180  
QY 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
Db 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
QY 241 TCAGAGACCCCGGGTTCACCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATTCGCGGG 300  
Db 241 TCAGAGACCCCGGGTTCACCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATTCGCGGG 300  
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTTCACCG 360  
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTTCACCG 360  
QY 361 ACAGATTCCTACTACCTGACCGCGAGAGGAGACCGCCACGTTGGTGGCCAGGCCAACT 420  
Db 361 ACAGATTCCTACTACCTGACCGCGAGAGGAGACCGCCACGTTGGTGGCCAGGCCAACT 420  
QY 421 CGCGGATCGAGACGACGAGGCGGTTCCGCGAGGCGCGGTTGCTGTCCGCGCAAGCGGG 480  
Db 421 CGCGGATCGAGACGACGAGGCGGTTCCGCGAGGCGCGGTTGCTGTCCGCGCAAGCGGG 480  
QY 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGCTGTCCCGCGCCAGA 540  
Db 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGCTGTCCCGCGCCAGA 540  
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCC 600  
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGGCC 600  
QY 601 TGATGGCGCCAAACATCGACGCGCAGCGCTTCGCTGGTGGCCAGGCGCGCGCTGG 660  
Db 601 TGATGGCGCCAAACATCGACGCGCAGCGCTTCGCTGGTGGCCAGGCGCGCGCTGG 660  
QY 661 TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACGCGCGGAGCT 705  
Db 661 TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACGCGCGGAGCT 705

## RESULT 7

US-09-285-306-12

; Sequence 12, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 12

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
 Db 1 CCCAGACGTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
 QY 61 CGATCAAGAGGTTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACACCCCGC 120  
 Db 61 CGATCAAGAGGTTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACACCCCGC 120  
 QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGTGGCCCGGGTGTCTGTCCCGGG 180  
 Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGTGGCCCGGGTGTCTGTCCCGGG 180  
 QY 181 AGCGGGCGGGCTGAGGTCCCGGAGTCCCGGAGTCCCGGCTCGCTGTGGTATGGCGGG 240  
 Db 181 AGCGGGCGGGCTGAGGTCCCGGAGTCCCGGAGTCCCGGCTCGCTGTGGTATGGCGGG 240  
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTATGGCGGG 300  
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTATGGCGGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGGTGTACCG 360  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGGTGTACCG 360  
 QY 361 ACGAGATCACTACCTGACCGCGGAGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT 420  
 Db 361 ACGAGATCACTACCTGACCGCGGAGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGGCGAGCGCGGTGTGTGTCGCGCAAGGGCG 480  
 Db 421 CGCCGATCGACGACAAAGGCGCGGTTCGGCGAGCGCGGTGTGTGTCGCGCAAGGGCG 480  
 QY 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGTCGTCGCGCGCCAGA 540  
 Db 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGTCGTCGCGCGCCAGA 540  
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACCGTCGCC 600  
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACCGTCGCC 600  
 QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGTGG 660  
 Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGTGG 660  
 QY 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705  
 Db 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

## RESULT 8

US-09-285-306-13

; Sequence 13, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 13  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium

Query Match

100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCAGACGTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
 Db 1 CCCAGACGTGGAGGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
 QY 61 CGATCAAGAGGTTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACACCCCGC 120  
 Db 61 CGATCAAGAGGTTCTTTCGGCACCGACGAGTGTCCAGTTCATGGACCAAGAACACCCCGC 120  
 QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGTGGCCCGGGTGTCTGTCCCGGG 180  
 Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGTGGCCCGGGTGTCTGTCCCGGG 180  
 QY 181 AGCGGGCGGGCTGAGGTCCCGGAGTCCCGGAGTCCCGGCTCGCTGTGGTATGGCGGG 240  
 Db 181 AGCGGGCGGGCTGAGGTCCCGGAGTCCCGGAGTCCCGGCTCGCTGTGGTATGGCGGG 240  
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTATGGCGGG 300  
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTATGGCGGG 300  
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGGTGTACCG 360  
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGGTGTACCG 360  
 QY 361 ACGAGATCACTACCTGACCGCGGAGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT 420  
 Db 361 ACGAGATCACTACCTGACCGCGGAGGAGGACCGCCACGTCGTGTGGCGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGGCGAGCGCGGTGTGTGTCGCGCAAGGGCG 480  
 Db 421 CGCCGATCGACGACAAAGGCGCGGTTCGGCGAGCGCGGTGTGTGTCGCGCAAGGGCG 480  
 QY 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGTCGTCGCGCGCCAGA 540  
 Db 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGTCGTCGCGCGCCAGA 540  
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACCGTCGCC 600  
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACCGTCGCC 600  
 QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGTGG 660  
 Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGTGG 660  
 QY 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705  
 Db 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

## RESULT 9

US-09-285-306-14

; Sequence 14, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 14  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium

US-09-285-306-14

Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 2.le-154;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCGTTCAGTCTGTGGCGG	60	
Db	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCGTTCAGTCTGTGGCGG	60	
Qy	61	CGATCAAGGAGTTCTTCGGCACCGACGACGTGTCCAGTTTCATGGACACGAAACACCCGC	120	
Db	61	CGATCAAGGAGTTCTTCGGCACCGACGACGTGTCCAGTTTCATGGACACGAAACACCCGC	120	
Qy	121	TGTCGGGGCTCACCCACAAGCGCGCCGTGTGGGGCTGGGCCCGGGTGGTCTGTCCCGGG	180	
Db	121	TGTCGGGGCTCACCCACAAGCGCGCCCTGTTCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG	180	
Qy	181	AGCGGGCGGGCTGGAGTCCGCGACAGTGCACCCGTCCCACTACGGCGCGATGTGCCCGA	240	
Db	181	AGCGGGCGGGCTGGAGTCCGCGACAGTGCACCCGTCCCACTACGGCGCGATGTGCCCGA	240	
Qy	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATTCGGTCTCGTTCGTGTATGCGCGGG	300	
Db	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATTCGGTCTCGTTCGTGTATGCGCGGG	300	
Qy	301	TCAACCGGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGCGTGTTCACCG	360	
Db	301	TCAACCGGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGCGTGTTCACCG	360	
Qy	361	ACGAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCCACGTGTGTGGCGGAGGCCAACT	420	
Db	361	ACGAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCCACGTGTGTGGCGGAGGCCAACT	420	
Qy	421	CGCCGATCCGACACAAGGGCCGGTTTCGGGAGGCCCCGGTGTGTGTCCGCCCAAGCGGG	480	
Db	421	CGCCGATCCGACACAAGGGCCGGTTTCGGGAGGCCCCGGTGTGTGTCCGCCCAAGCGGG	480	
Qy	481	CGGAGGTGAGTACGTGGCCCTGTCGCGAGGTGGACTACATGGAAGTGTTCGCGCGCCAGA	540	
Db	481	CGGAGGTGAGTACGTGGCCCTGTCGCGAGGTGGACTACATGGAAGTGTTCGCGCGCCAGA	540	
Qy	541	TGGTGTTCGGTGGCCACCGCATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCC	600	
Db	541	TGGTGTTCGGTGGCCACCGCATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGCC	600	
Qy	601	TGATGGGCGCAACATGACGCGCCAGGCGGTTCCCGCTGGTTCGCGACGAGGCGCGCGCTGG	660	
Db	601	TGATGGGCGCAACATGACGCGCCAGGCGGTTCCCGCTGGTTCGCGACGAGGCGCGCGCTGG	660	
Qy	661	TGGGACCGGGCATGGAGCTGCGCGGCGCATCGACGCGGCGACGT	705	
Db	661	TGGGACCGGGCATGGAGCTGCGCGGCGCATCGACGCGGCGACGT	705	

```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA

```

```

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affimetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 24

```



```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; TYPE: DNA
; LENGTH: 705
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGAGTCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGACCCGTCCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGACCCGTCCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
QY 241 TCGAGACCCCGGAGGTCCCAACATCGCTGATCGGCTCGCTGTCGCTGTCGCTGATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGCTGATCGGCTCGCTGTCGCTGTCGCTGATGCGCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGCTGTCGTCGCGCAGGCGCAACT 420
Db 361 ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGCTGTCGTCGCGCAGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGGTGTGTCGCGCCGCAAGGGCG 480
Db 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGGTGTGTCGCGCCGCAAGGGCG 480
QY 481 GCGAGGTCGATGACGTCGCTCGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCGAGA 540
Db 481 GCGAGGTCGATGACGTCGCTCGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCGAGA 540
QY 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCGACCGTGGCC 600
Db 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCGACCGTGGCC 600
QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTTCGCTGTCGAGCGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTTCGCTGTCGAGCGAGCGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGGATCGACGCGCGCGACGT 705
Db 661 TGGGACCGGCGATGAGCTGCGCGCGCGGATCGACGCGCGCGACGT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; TYPE: DNA
; LENGTH: 705
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGAGTCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCGCTGTCGAGTTTCATGACACAGAACACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCGCTGTCGAGTTTCATGACACAGAACACCCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGACCCGTCCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTCGACCCGTCCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
QY 241 TCGAGACCCCGGAGGTCCCAACATCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGTCGTCGCGCAGGCGCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGTCGTCGCGCAGGCGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGGTGTGTCGCGCCGCAAGGGCG 480
Db 421 CGCGGATCGACGACAAAGGCGCGGTTTCGCGGAGGCGCGGGTGTGTCGCGCCGCAAGGGCG 480
QY 481 GCGAGGTCGATGACGTCGCTCGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCGAGA 540
Db 481 GCGAGGTCGATGACGTCGCTCGTCGAGGTGGACTACATGGAAGTGTGTCGCGCGCCGAGA 540
QY 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCGACCGTGGCC 600
Db 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCGACCGTGGCC 600
QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTTCGCTGTCGAGCGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTTCGCTGTCGAGCGAGCGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGGATCGACGCGCGCGACGT 705
Db 661 TGGGACCGGCGATGAGCTGCGCGCGCGGATCGACGCGCGCGACGT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
```



Db 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGTCGTGGCAGCGAGGCGCCGCTGG 660  
QY 661 TGGGACCGGATGAGCTGCGCGGGGATGACGCGGCGACGT 705  
Db 661 TGGGACCGGATGAGCTGCGCGGGGATGACGCGGCGACGT 705  
RESULT 15  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 3.7e-151;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
QY 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTCCGGACCGACCGAGCTGCCAGTTCATGSAACGAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTCCGGACCGACCGAGCTGCCAGTTCATGSAACGAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCCACAAGGCGCCCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180  
Db 121 TGTGGGGCTGTACCCACAAGCGCCCTGTGCGCGCTGCGGCGCGGGTGTCTGTCCCGGG 180  
QY 181 AGCGGGCCGGCTGGAGTCCGGAGCTGCACCCCGTCCCACTACGCGCGGATGTCCCGGA 240  
Db 181 AGCGGGCCGGCTGGAGTCCGGAGCTGCACCCCGTCCCACTACGCGCGGATGTCCCGGA 240  
QY 241 TCGAGACCCCGGAGGTCCTCCCAACATCGGTCTGATCGGCTCGGTGTCGGTATCGCGGG 300  
Db 241 TCGAGACCCCGGAGGTCCTCCCAACATCGGTCTGATCGGCTCGGTGTCGGTATCGCGGG 300  
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTCGACGCGCGTGGTCAACG 360  
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGCGCGTGGTCAACG 360  
QY 361 ACGAGATCCACTACCTGACCCCGACGAGGAGACCGCCACGTGGTGGCGGAGGCCAACT 420  
Db 361 ACGAGATCCACTACCTGACCCCGACGAGGAGACCGCCACGTGGTGGCGGAGGCCAACT 420  
QY 421 CGCCGATCGAGCAAGGCGCGTTTCGCGAGGCGCGGGTGTGGTCCCGCGCAGGCGG 480  
Db 421 CGCCGATCGAGCAAGGCGCGTTTCGAGAGGACCCCGGGTGTGGTCCCGCGCAGGCGG 480  
QY 481 GCGAGGTGAGTACGTGCTCCGAGGTGGACTACATGAGCGTGTGCGCGCGCCAGA 540  
Db 481 GCGAGGTGAGTACGTGCTCCGAGGTGGACTACATGAGCGTGTGCGCGCGCCAGA 540  
QY 541 TGGTGTGCGTGGCCACCCCGATGATCCCGTTCCTCGAGCAAGCAACCCGATGCC 600  
Db 541 TGGTGTGCGTGGCCACCCCGATGATCCCGTTCCTCGAGCAAGCAACCCGATGCC 600

QY 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGTCGTGGCAGCGAGGCGCCGCTGG 660  
Db 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGTCGTGGCAGCGAGGCGCCGCTGG 660  
QY 661 TGGGACCGGATGAGCTGCGCGGGGATGACGCGGCGACGT 705  
Db 661 TGGGACCGGATGAGCTGCGCGGGGATGACGCGGCGACGT 705

Search completed: August 20, 2004, 01:36:42  
Job time : 408.972 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-9

Perfect score: 705

Sequence: 1 cccaggagctggaggcgatc.....ggcgatcgacggcgagct 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A COMB.seq: \*  
2: /cgn2\_6/ptodata/2/ina/5B COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A COMB.seq: \*  
4: /cgn2\_6/ptodata/2/ina/6B COMB.seq: \*  
5: /cgn2\_6/ptodata/2/ina/PCTUS COMB.seq: \*  
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-08-520-946-136
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4092	4	US-09-252-991A-4737

28 371.2 52.7 4092 4 US-09-252-991A-4771 Sequence 4771, Ap  
29 337.2 47.8 4083 4 US-09-489-039A-22 Sequence 22, Appl  
30 337.2 47.8 4206 4 US-09-489-039A-30 Sequence 30, Appl  
31 293.4 41.6 432 2 US-08-313-185-59 Sequence 59, Appl  
32 293.4 41.6 432 3 US-09-082-614A-59 Sequence 59, Appl  
33 286.2 40.6 324 4 US-08-750-088A-36 Sequence 36, Appl  
34 286.2 40.6 324 4 US-09-722-319-36 Sequence 36, Appl  
35 265.2 37.6 2964 4 US-09-540-236-1097 Sequence 1097, Ap  
36 265.2 37.6 4167 4 US-09-543-681A-3177 Sequence 3177, Ap  
37 265.2 37.6 31063 4 US-09-596-002-20 Sequence 20, Appl  
38 255.6 36.3 319 4 US-08-750-088A-35 Sequence 35, Appl  
39 255.6 36.3 319 4 US-09-722-319-35 Sequence 35, Appl  
40 249.8 35.4 11935 4 US-09-634-238-401 Sequence 401, App  
41 244.4 34.7 14672 4 US-08-961-521-111 Sequence 111, App  
42 244.4 34.7 1830121 4 US-09-557-884-1 Sequence 1, Appli  
43 244.4 34.7 1830121 4 US-09-643-990A-1 Sequence 1, Appli  
44 241.2 34.2 4143 4 US-09-328-352-4006 Sequence 4006, Ap  
45 226.4 32.1 329 4 US-08-750-088A-34 Sequence 34, Appl

#### ALIGNMENTS

#### RESULT 1

US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 8,1e-112;
Matches 546; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 2 CCAGGACGTGGAGGCGATCACACCGGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 61
QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTTCATGGACCAAGAAACCCGC 120
DB 62 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTTCATGGACCAAGAAACCCGC 121
QY 121 TGTCCGGGCTCACCCAAAGCGCCGCTGTCCGCGCTGTGGCCCGGGTGTCTGTCCGGG 180
DB 122 TGTCCGGGTTGACCCAAAGCGCCGCTGTCCGCGCTGTGGCCCGGGTGTCTGTCCAGTG 181
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGTGACACCGTCCACTACGCGCGGATGCCCCGA 240
DB 182 AGCGTCCGGGCTGGAGGTCGCGAGCTGTGACACCGTCCACTACGCGCGGATGCCCCGA 241
QY 241 TCAGAGACCCGGAGGTCACCAATCGTCTCGTCTCGTCTCGTCTCGTCTCGTCTCGTCTCG 300
DB 242 TCAGAAACCCCTGAGGGGCCCAACATCGTCTCGTCTCGTCTCGTCTCGTCTCGTCTCGTCT 301
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGGCGTGTACCG 360
DB 302 TCAACCCGTTTCGGGTTTCATCGAAGCGCGTACCGAAGGTGGTTCGACGGCGTGTAGCG 361
QY 361 ACAGATTCACACTACGACCGCGACGAGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
DB 362 ACAGATTCGTTACCTGACCGCGACGAGAGGACCGCCAGCTGGTGGCGAGGCCAAAT 421
QY 421 CGCGATTCAGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
DB 422 CGCGATTCAGATCGGACGCTGCTTGTTCGAGCGCGCGTGTCTGGTCCGCGCAAGCGG 481
QY 481 GCGAGGTCGAGTACGTGCCCTCGTTCGAGGTGGAATACATGGAAGTGTTCGCGCGCGCAGA 540
DB 482 GCGAGGTCGAGTACGTGCCCTCGTTCGAGGTGGAATACATGGAAGTGTTCGCGCGCGCAGA 541
QY 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCAACCGTGGCC 600
DB 542 TGGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCAACCGTGGCC 601
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGAGAGGAGCGCGCGTGG 660
DB 602 TCATGGGGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGAGAGGAGCGCGCGTGG 661
QY 661 TGGGCAACCGGATGAGAGTCGCGCGCGGATTCGACGCGGGAGCGT 705
DB 662 TGGGCAACCGGATGAGAGTCGCGCGCGGATTCGACGCGGGAGCGT 706

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 3,9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 762963 CCAGGACGTGGAGGCGATCACACCGGACAGCTTGATCAACATCCGCGCGTGTGGCGG 763022
QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTTCATGGACCAAGAAACCCGC 120
DB 763023 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTGAGCCAAATTCATGGACCAAGAAACCCGC 763082
QY 121 TGTCCGGGCTCACCCAAAGCGCGCTGTCCGCGCTGTGGCCCGGGTGTCTGTCCCGGG 180
DB 763083 TGTCCGGGTTGACCCAAAGCGCGCTGTCCGCGCTGTGGCCCGGGTGTCTGTACGTG 763142
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGCTGTGACACCGCTCCACTACGCGCGGATGCCCCGA 240
DB 763143 AGCGTCCGGGCTGGAGGTCGCGAGCTGTGACACCGCTCCACTACGCGCGGATGCCCCGA 763202
QY 241 TCAGAGACCCCGGAGGTTCCAAACATCGTCTGATTCGCTCTGATTCGCTCTGATTCGCGGGG 300
DB 763203 TCAGAAACCCCTGAGGGGCCCAACATCGTCTGATTCGCTCTGATTCGCTCTGATTCGCGGGG 763262
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGGCGTGTACCG 360
DB 763263 TCAACCCGTTTCGGGTTTCATCGAAGCGCGCTACCGAAGGTGGTTCGACGGCGTGTAGCG 763322
QY 361 ACAGATTCACACTACCTACCGCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
DB 763323 ACAGATTCGTTACCTGACCGCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAAAT 763382
QY 421 CGCGATTCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGGTTCGCGCGCAAGCGG 480
DB 763383 CGCGATTCGATTCGCGAGCGGTCGCTTCGTCGAGCGCGCGTGTCTGGTCCGCGCAAGCGG 763442
QY 481 GCGAGGTCGAGTACGTGCCCTCGTTCGAGGTGGAATACATGGAAGTGTTCGCGCGCGCAGA 540
DB 763443 GCGAGGTCGAGTACGTGCCCTCGTTCGAGGTGGAATACATGGAAGTGTTCGCGCGCGCAGA 763502
QY 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCAACCGTGGCC 600
DB 763503 TGGTTCGTTGGCCACCGCGATGATTCCTTCCTGGAGACGACGACGACCAACCGTGGCC 763562
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGAGGAGGAGCGCGCGTGG 660
DB 763563 TCATGGGGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGAGGAGGAGCGCGCGTGG 763622
QY 661 TGGGCAACCGGATGAGAGTCGCGCGCGGATTCGACGCGGGAGCGT 699
DB 763623 TGGGCAACCGGATGAGAGTCGCGCGCGGATTCGACGCGG 763661

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
; US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred No. 3.9e-110; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60
DB 761003 CCCAGGAGCTGGAGGCGATCAACCGCAGACCGTTCATCAACATCGGCGGTGGTGGCGG 761062

QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
DB 761063 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTGAGCCAAATTCATGACACAGAACACCCGC 761122

QY 121 TGTGGGCTCAACCAAGCGCCCTGTGGCGCTGGCGCGGTGGTCTGTCGCCGG 180
DB 761123 TGTGGGCTGACCAAGCGCCCTGTGGCGCTGGCGCGGTGGTCTGTCACGTG 761182

QY 181 AGCGGCGCGGTGAGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
DB 761183 AGCGTGGCGGCTGAGGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 761242

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGCTGATGCGGTGACGCGCGG 300
DB 761243 TCGAACCCTTGGAGGGGCGCAACATCGGTCTGATCGGTTCGCTGCTGATGCGGTGACGCGCGG 761302

QY 301 TCAACCCCTTGGGTTTCATGAGAGCGCGTACCGCAAGGTGTCACGCGGTGTCACCG 360
DB 761303 TCAACCCCTTGGGTTTCATGNAACCGCGTACCGCAAGGTGTCACGCGGTGTCACCG 761362

QY 361 ACGAGATCCACTACTACCGCGCAGAGGAGCGCACGTGTTGGCGAGGCGCAACT 420
DB 761363 ACGAGATCGTACTACCGCGCAGAGGAGCGCACGTGTTGGCGAGGCGCAACT 761422

QY 421 CGCCGATCGACGACGAGGCGCGTTTCGCGAGGCGCGGTTGCTGTCGCGCGAGGCGG 480
DB 761423 CGCCGATCGATGCGGACGCGTTCGTTTCGTCGAGCGCGCGTGTGTTGTCGCGCGAGGCGG 761482

QY 481 CGGAGGTGAGTACGTGCGCTCGTCCGAGGTGACATACATGAGCTGTGCGCGCGCCAGA 540
DB 761483 CGGAGGTGAGTACGTGCGCTCGTCTGAGGTGACATACATGAGCTGTGCGCGCGCCAGA 761542

QY 541 TGGTGTGCGTGGCCACCGAGTATCCCGTTCCTTCGAGCAGCAGCAGCAGCAGTGC 600
DB 761543 TGGTGTGCGTGGCCACCGAGTATCCCGTTCCTTCGAGCAGCAGCAGCAGCAGTGC 761602

QY 601 TGATGGGCGCCACATGACGCGCAGGCGGTTCGCTGTTGGCGAGCGCGCGCTGG 660
DB 761603 TCATGGGCGCACAACATGACGCGCAGGCGGTTCGCTGTTGGCGAGCGCGCGCTGG 761662

QY 661 TGGGACCGGATGAGTGTGCGCGCGGATCGACGCGG 699
DB 761663 TGGGACCGGATGAGTGTGCGCGCGGATCGACGCGG 761701
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RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57
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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60
DB 1124 CCCAGGAGCTGGAGGCGATCAACCGCAGACCGCTGATCAATATCGTCCGTGGTGGCGG 1183

QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGCCAGTTCATGACACAGAACACCCGC 120
DB 1184 CTATCAAGGAATCTTCGGCACCAGCCAGCTGTGCGAGTTTCATGATCAGAACACCCCTC 1243

QY 121 TGTGGGCTCAACCAAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTCCCGGG 180
DB 1244 TGTGGGCTGACCCACAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTGCGGTG 1303

QY 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
DB 1304 AGCGTGGCGGCTAGAGGTTCGCGACGTGCAACCGTTCGCACTACGCGCGGATGTCCCGGA 1363

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
DB 1364 TCGAGACTCCCGAGGGGCGCGCAATAGGTCTGATCGGTTCATGTCGCTGATGCGCGGG 1423

QY 301 TCAACCCCTTGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCACGCGCGTGTACCG 360
DB 1424 TCAACCCCTTGGGTTTCATCGAACAACCGTACCGCAAGGTGGTTCACGCGGTGTGTCAGG 1483
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QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGACCGCCACCTGCTGGCGCAGGCCAACT 420  
Db 1484 ACAGATCGAATATTGACCGCTGACGAGGAGACCGCCATGCTGGCGCAGGCCAACT 1543  
QY 421 CGCCGATCAGCAGCAAGGCGCGTTCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480  
Db 1544 CGCCGATCAGCAGGCGCGCGTTCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 1603  
QY 481 GCAGGTTCGAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540  
Db 1604 GCAGGTTCGAGTACGTCCTCGTCCGAGGTGGAATACATGATGATGTCGTCGCGCCAGA 1663  
QY 541 TGGTTCGCTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCGCCAACTGTCGCC 600  
Db 1664 TGGTTCGCTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCGCCAACTGTCGCC 1723  
QY 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660  
Db 1724 TGATGGCGCGTAACATGACGCGCAAGCGGTTCCGTTGGTGGCAGGAGCGCGCTGG 1783  
QY 661 TGGGACCGGCATGAGCTCGCGCGCGCGATCGACGCG 699  
Db 1784 TGGGTACCGGTATGGAGTTGGCGCGCGCCATCGACGCTG 1822

## RESULT 5

US-09-082-614A-57  
; Sequence 57, Application US/09082614A  
; Patent No. 6124098

## GENERAL INFORMATION:

; APPLICANT: Heym, Beate  
; APPLICANT: Cole, Stewart  
; APPLICANT: Young, Douglas  
; APPLICANT: Zhang, Ying  
; APPLICANT: Honore, Nadine  
; APPLICANT: Telenti, Amalio  
; APPLICANT: Bodmer, Thomas  
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance  
; TITLE OF INVENTION: in Mycobacterium Tuberculosis  
; NUMBER OF SEQUENCES: 66  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &  
; ADDRESSEE: Dunner  
; STREET: 1300 I Street, N.W.  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: USA  
; ZIP: 20005-3315

## COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/082,614A  
; FILING DATE:

## CLASSIFICATION:

; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/313,185  
; FILING DATE: 12-OCT-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meyers, Kenneth J.  
; REGISTRATION NUMBER: 25,146  
; REFERENCE/DOCKET NUMBER: 02356.0068-00000  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 408-4000  
; TELEFAX: (202) 408-4400  
; INFORMATION FOR SEQ. ID. NO: 57:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3447 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single

; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-09-082-614A-57

Query Match 79.2%; Score 558.2; DB 3; Length 3447;  
Best Local Similarity 87.4%; Pred. No. 1.7e-101;  
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTGTGGCGG 60  
Db 1124 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAATATCCGTCGCGTGGCGG 1183  
QY 61 CGATCAAGAGATTCTTCGCGACAGCAGCTGTCGAGTTCATGGACCAACAACCCGC 120  
Db 1184 CTATCAAGGAATTCCTTCGCGACAGCAGCTGTCGAGTTCATGGATCAGAACACCTC 1243  
QY 121 TGTTCGCGGCTTCAACCAAGCGCGCTGTCGCGCTGGCGCGCGGTGCTCTCTCCCGGG 180  
Db 1244 TGTTCGCGGCTTCAACCAAGCGCGCTGTCGCGCTGGCGCGCGGTGCTCTCTCCCGGG 1303  
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCCGCTCCACTACGCGCGGATGTGCCGA 240  
Db 1304 AGCGTCCGCGCTAGAGGTCGCTGACCTGACCTTCGCACTACGCGCGGATGTGCCGA 1363  
QY 241 TCGAGACCCCGAGGCTCCCAACATCGCTCGCTCGCTCGCTGCTGTCGCGCGG 300  
Db 1364 TCGAGACTCGGAGGCGCGCAATAGTCTGATTCGTTTCTGTCGTCGTCGCGCGG 1423  
QY 301 TCAACCCGTTTCGCGTTTCATCGAGACCCGTAACCGCAAGTGGTTCGAGCGGCTGTACCG 360  
Db 1424 TCAACCCGTTTCGCGTTTCATCGAAACACCCGTACCGCAAGTGGTTCGAGCGGCTGTACCG 1483  
QY 361 ACAGATCACAATCTGACCGCGCAGGAGGAGACCGCCACGTCGTCGCGCAGGCCAACT 420  
Db 1484 ACAGATCGAATATTGACCGCTGACGAGGAGACCGCCATGCTGGCGCAGGCCAACT 1543  
QY 421 CGCGGATCGACGACAAGGCGCGTTCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480  
Db 1544 CGCGGATCGACGAGCGCGCGCTTCCTCGAGCGCGCGGCTGCTGGTTCGCGCAAGCGG 1603  
QY 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGAATACATGAGCGTGTGCGCGCGCGAGA 540  
Db 1604 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGAATACATGAGTGTCTCGCCACCGCGA 1663  
QY 541 TGGTTCGCTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCGCCAACTGTCGCC 600  
Db 1664 TGGTTCGCTGGCCACCGGATGATTCGCTTTCGAGCAGCAGCGCCAACTGTCGCC 1723  
QY 601 TGATGGCGCGCAACATGACGCGCGCGGTTCCGCTGGTGGCAGGAGCGCGCGCTGG 660  
Db 1724 TGATGGCGCGTAACATGACGCGCGCGGTTCCGTTGGTGGCAGGAGCGCGCTGG 1783  
QY 661 TGGGACCGGCATGAGGCTGCGCGCGCGCGATCGACGCG 699  
Db 1784 TGGGTACCGGTATGGAGTTGGCGCGCGCCATCGACGCTG 1822

## RESULT 6

US-08-250-030-1  
; Sequence 1, Application US/08250030  
; Patent No. 5643723

## GENERAL INFORMATION:

; APPLICANT: Persing, David H.  
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in  
; TITLE OF INVENTION: Clinical Specimens  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Schwegman, Lundberg & Woessner  
; STREET: 3500 IDS Center  
; CITY: Minneapolis  
; STATE: MN  
; COUNTRY: USA



ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
FILING DATE: 26-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Muetting, Ann M.  
REGISTRATION NUMBER: 33,977  
REFERENCE/DOCKET NUMBER: 150.105US1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db |||||  
QY 341 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 400  
Db |||||  
QY 61 CGATCAAGAGTTCTTCGGCAGACGACGCTGTCAGTTATGACACCAACACCCGC 120  
Db |||||  
QY 401 CGATCAAGAGTTCTTCGGCAGACGACGCTGTCAGTTATGACACCAACACCCGC 460  
Db |||||  
QY 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCGGGCTGGGCGGCTGTCGTCTGTCCCGGG 180  
Db |||||  
QY 461 TGTCCGGGCTCACCCACAAGCCCGCTGTCGGGCTGGGCGGCTGTCGTCTGTCCCGGG 520  
Db |||||  
QY 181 AGCGGGCCGGGTGGAGGTCCCGACGACGCTGACCCGCTCCCACTACGCGCGGATGCGCGA 240  
Db |||||  
QY 521 AGCGGTCCGGGTGGAGGTCCCGACGACGCTGACCCGCTCCCACTACGCGCGGATGCGCGA 580  
Db |||||  
QY 241 TCGACACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCGGT 300  
Db |||||  
QY 581 TCGAACCCTTGGGGTTCATCGAAGCCCGTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 640  
Db |||||  
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 360  
Db |||||  
QY 641 TCAACCCGTTCCGGTTCATCGAAGCCCGTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 700  
Db |||||  
QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGCCGCTGTCGTGTCGCGAGGCGCAACT 420  
Db |||||  
QY 701 ACAGATCGTGTACTGACCGCGCAGAGGAGGACCGCAAGGTGGTTCGACGCGGTGTTAGCG 760  
Db |||||  
QY 421 CGCCGATCGACAGCAAGGCGCGTTCGCGAGGCGCCGGTCTGTCGCGCGCGAGGCGG 480  
Db |||||  
QY 761 CGCCGATCGATCGGAGCGTCTGTCGTCGAGCGCGCGTCTGTCGTCGCGCGAGGCGG 820  
Db |||||  
QY 481 CGGAGGTCCGAGTACGTCGCTCGTCGAGGTGGACTACATGAGCTGTCGCGCGCGCAGA 540  
Db |||||  
QY 821 CGGAGGTCCGAGTACGTCGCTCGTCGAGGTGGACTACATGAGCTGTCGCGCGCGCAGA 880  
Db |||||  
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCTTCTCTGAGCAGCAGACGCCAACGTCGCC 600  
Db |||||  
QY 881 TGGTGTCCGTGGCCACCGCGATGATCCCTTCTCTGAGCAGCAGACGCCAACGTCGCC 940  
Db |||||  
QY 601 TGATGGGCGCAACATGACGCGCGAGGCGG 630  
Db |||||  
QY 941 TCATGGGCGCAACATGACGCGCGAGGCGG 970  
Db |||||

RESULT 7  
PCT-US95-06790-1  
Sequence 1, Application PC/TUS9506790  
GENERAL INFORMATION:  
APPLICANT: Mayo Foundation for Medical Education and Research  
APPLICANT: and Hoffmann-La Roche Inc.  
TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
TITLE OF INVENTION: Resistance to Rifampin  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Schwegman, Lundberg & Woessner  
STREET: 3500 IDS Center  
CITY: Minneapolis  
STATE: MN  
COUNTRY: USA  
ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/06790  
FILING DATE: 26-MAY-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Raasch, Kevin W.  
REGISTRATION NUMBER: 35,651  
REFERENCE/DOCKET NUMBER: 150.105WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;  
Best Local Similarity 91.1%; Pred. No. 5.1e-98;  
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db |||||  
QY 341 CCCAGACGTGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 400  
Db |||||  
QY 61 CGATCAAGAGTTCTTCGGCAGACGACGCTGTCAGTTATGACACCAACACCCGC 120  
Db |||||  
QY 401 CGATCAAGAGTTCTTCGGCAGACGACGCTGTCAGTTATGACACCAACACCCGC 460  
Db |||||  
QY 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCGGGCTGGGCGGCTGTCGTCTGTCCCGGG 180  
Db |||||  
QY 461 TGTCCGGGCTCACCCACAAGCCCGCTGTCGGGCTGGGCGGCTGTCGTCTGTCCCGGG 520  
Db |||||  
QY 181 AGCGGGCCGGGTGGAGGTCCCGACGACGCTGACCCGCTCCCACTACGCGCGGATGCGCGA 240  
Db |||||  
QY 521 AGCGGTCCGGGTGGAGGTCCCGACGACGCTGACCCGCTCCCACTACGCGCGGATGCGCGA 580  
Db |||||  
QY 241 TCGACACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGATCGGTCTGATCGGTCTGATCGGT 300  
Db |||||  
QY 581 TCGAACCCTTGGGGTTCATCGAAGCCCGTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 640  
Db |||||  
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 360  
Db |||||  
QY 641 TCAACCCGTTCCGGTTCATCGAAGCCCGTACCGCAAGGTGGTTCGACGCGGTGTTAGCG 700  
Db |||||  
QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGCCGCTGTCGTGTCGCGAGGCGCAACT 420  
Db |||||

Db 701 ACAGATCGTGTTACCTGACCGCCGACGAGGAGACCGCACGCTGGTGCCACAGCCCAATT 760  
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGGGTGTGTTCCGCGCGCAAGCGCG 480  
Db 761 CGCCGATCGATGCGGACGCGTCTTCTGTCAGCGCGCGGTGCTGTCGCGCGCAAGCGCG 820  
QY 481 GCAGGTGAGTACGTCGCTTCGCGAGGTGACATACATGAGCGTGTGCGCGCGCGCG 540  
Db 821 GCAGGTGAGTACGTCGCTTCGCGAGGTGACATACATGAGCGTGTGCGCGCGCGCG 880  
QY 541 TGCTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCGCCAAACCGTGCCC 600  
Db 881 TGCTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCGCCAAACCGTGCCC 940  
QY 601 TGATGGCGCCAAACATGACGCGCAGCGCG 630  
Db 941 TCATGGGGCAACATGACGCGCAGCGCG 970  
  
RESULT 8  
US-08-757-653-135  
; Sequence 135, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135  
  
Query Match 75.2%; Score 530.4; DB 2; Length 620;  
Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;  
  
QY 36 ATCAATCCCGTCCAGTCTGTCGCGCGGATCAAGAGTCTTCGCGCACCAGCCAGCTGTCC 95  
Db 1 ATCAATCCCGCGCGTGTGTCGCGCGGATCAAGAGTCTTCGCGCACCAGCCAGCTGTGAGC 60  
QY 96 CAGTTCATGGACCAAGAACCCCGTGTGCGGGGCTTACCCACAAAGCGCGCTGTGCGGG 155  
Db 61 CAATTATGGACCAAGAACCCCGTGTGCGGGTTCGCGCACCAGCCAGCTGTGCGGG 120

QY 156 CTGGGCGCGGTGCTGTCTCCGGGAGCGGGCGGGCTCGAGGTCCGCGACGTGSCACCG 215  
Db 121 CTGGGCGCGGTGCTGTCTCCGGGAGCGGGCGGGCTCGAGGTCCGCGACGTGSCACCG 180  
QY 216 TCCACTACGGCGGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGCACTACGGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240  
QY 276 GGCTCGCTGTGCTGTGATGCGGGGTCAACCGTTCGGGTTCATCGAGACGCGTACCGC 335  
Db 241 GGCTCGCTGTGCTGTGATGCGGGGTCAACCGTTCGGGTTCATCGAAACGCGTACCGC 300  
QY 336 AAGTGTGTGACCGCGGTGTCACCGACGAGATCCACTACTCGCGCGCGCAGGAGGAC 395  
Db 301 AAGTGTGTGACCGCGGTGTCAGGACGAGATCGTGTACCTGACCGCGCGCAGGAGGAC 360  
QY 396 CGCCACGTGTGCGCGAGGCGCAACTCGCCGATCGACAAAGGGCCGGTTCGCGGAGGCC 455  
Db 361 CGCCACGTGTGCGCGAGGCGCAACTCGCCGATCGATGCGGACGGTTCGTCGCGCGC 420  
QY 456 CGGGTGTGTCGCGCGCAAGGGCGGGAGGTGAGTACGTGCGCTCGCTCGAGGTGGAC 515  
Db 421 CGGGTGTGTCGCGCGCAAGGGCGGGAGGTGAGTACGTGCGCTCGCTCGAGGTGGAC 480  
QY 516 TACATGACGTGTGCGCGCGCGCGATGCTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575  
Db 481 TACATGACGTGTGCGCGCGCGCGATGCTGTGCGTGGCCACCGCGATGATTCCTCTCTG 540  
QY 576 GAGCACGACGACGCGCAACCGTGTGCGCTGATGGGCGCCCAACATGCGAGCGCGCGTTC 635  
Db 541 GAGCACGACGACGCGCAACCGTGTGCGCTGATGGGCGCCCAACATGCGAGCGCGCGTTC 600  
QY 636 CTGGTGGCGACGCGAGGCGCC 655  
Db 601 CTGGTGGCGACGCGAGGCGCC 620  
  
RESULT 9  
US-08-757-653-138/c  
; Sequence 138, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY	36	ATCAACATCCGTCAGTGTGGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC	95
Db	620	ATCAACATCCGCGGTGTGCGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC	561
QY	96	CAGTTCATGGACCAAGAACCCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG	155
Db	560	CAATTCATGGACCAAGAACCCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG	501
QY	156	CTGGCCCGGGTGTGTGTCGGGAGCGGGCGGGCTGGAGTCCGACGACGACCG	215
Db	500	CTGGGGCGGGTGTGTGTCAGTGGCGGTGCGGGCTGGAGTCCGACGACGACCG	441
QY	216	TCCACTACGGCCGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC	275
Db	440	TCCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC	381
QY	276	GGCTCGTGTGGTGTATGCGGGGTCAACCCGTTGGGTTCATCGAGACGCGTACCG	335
Db	380	GGCTCGTGTGGTGTATGCGGGGTCAACCCGTTGGGTTCATCGAGACGCGTACCG	321
QY	336	AAGTGTGTGCGCGGTGTGTCACCAAGAGATCCACTACCTGACCGCGACGAGGAC	395
Db	320	AAGTGTGTGCGCGGTGTGTCACCAAGAGATCCACTACCTGACCGCGACGAGGAC	261
QY	396	CGCCAGTGTGGCGAGGCAACATCGCGGATCGACGACGAGGGCGGTTCCGCGAGGC	455
Db	260	CGCCAGTGTGGCGAGGCAACATCGCGGATCGACGACGAGGGCGGTTCCGCGAGGC	201
QY	456	CGGTGTGTGTCGGCGCAAGCGGGCGAGGTGAGTACGTGCTCTGAGGTGGAC	515
Db	200	CGGTGTGTGTCGGCGCAAGCGGGCGAGGTGAGTACGTGCTCTGAGGTGGAC	141
QY	516	TACATGACGTCGCGCGGACGATGTGCGGTGGCGGACGAGGTCGAGTACGTCGTC	575
Db	140	TACATGACGTCGCGCGGACGATGTGCGGTGGCGGACGAGGTCGAGTACGTCGTC	81
QY	576	GAGCAGCAGCGCAACCGTCCCTGATGGCGCCCAACATGCGCGGAGCGGTTCG	635
Db	80	GAGCAGCAGCGCAACCGTCCCTGATGGCGCCCAACATGCGCGGAGCGGTTCG	21
QY	636	CTGGTGGCAGCGAGGCGCC 655	
Db	20	CTGGTGGCAGCGAGGCGCC 1	

RESULT 10

US-08-520-946-135  
 ; Sequence 135, Application US/08520946  
 ; Patent No. 6372424  
 ; GENERAL INFORMATION:  
 ; APPLICANT: BROW, MARY ANN D.  
 ; APPLICANT: LYAMICHEV, VICTOR I.  
 ; APPLICANT: OLIVE, DAVID M.  
 ; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
 ; NUMBER OF INVENTIONS: PATHOGENS  
 ; NUMBER OF SEQUENCES: 160  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: MEDLEN & CARROLL  
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200  
 ; CITY: SAN FRANCISCO  
 ; STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/520,946  
 FILING DATE:  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: CARROLL, PETER G.  
 REGISTRATION NUMBER: 32,837  
 REFERENCE/DOCKET NUMBER: FORS-01756  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 135:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 620 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;  
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;  
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY	36	ATCAACATCCGTCAGTGTGGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC	95
Db	1	ATCAACATCCGCGGTGTGTCGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC	60
QY	96	CAGTTCATGGACCAAGAACCCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG	155
Db	61	CAATTCATGGACCAAGAACCCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG	120
QY	156	CTGGCCCGGGTGTGTGTCGGGAGCGGGCGGGCTGGAGTCCGCGACGACGAGGAC	215
Db	121	CTGGGGCGGGTGTGTGTCAGTGGCGGTGCGGGCTGGAGTCCGCGACGAGGAC	180
QY	216	TCCACTACGGCCGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC	275
Db	181	TCCACTACGGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC	240
QY	276	GGCTCGTGTGGTGTATGCGGGGTCAACCGGTTCGGGTTCATCGACGACGAGTGTCC	335
Db	241	GGCTCGTGTGGTGTATGCGGGGTCAACCGGTTCGGGTTCATCGACGACGAGTGTCC	300
QY	336	AAGTGTGTGCGCGGACGATGTGCGGTGGCGGACGAGGTCACCTACCTGACCGCGAGGAGGAC	395
Db	301	AAGTGTGTGCGCGGACGATGTGCGGTGGCGGACGAGGTCACCTACCTGACCGCGAGGAGGAC	360
QY	396	CGCCAGTGTGGCGAGGCAACATCGCGGATCGACGACGAGGGCGGTTCCGCGAGGAC	455
Db	361	CGCCAGTGTGGCGAGGCAACATCGCGGATCGATCGGACGAGTGTTCGTCGAGCGG	420
QY	456	CGGTGTGTGTCGGCGGACGAGGCGGGCGAGTCCAGTACGTCGTCCTGTTCGAGGAGGAC	515
Db	421	CGGTGTGTGTCGGCGGACGAGGCGGGCGAGTCCAGTACGTCGTCCTGTTCGAGGAGGAC	480
QY	516	TACATGACGTCGCGCGGACGATGTGCGGTGGCGGACGAGGTCGAGTACGTCGTCCTC	575
Db	481	TACATGACGTCGCGCGGACGATGTGCGGTGGCGGACGAGGTCGAGTACGTCGTCCTC	540
QY	576	GAGCAGCAGCGCAACCGTCCCTGATGGCGCCCAACATGCGCGGAGCGGAGGAGTTCG	635
Db	541	GAGCAGCAGCGCAACCGTCCCTGATGGCGCCCAACATGCGCGGAGCGGAGGAGTTCG	600
QY	636	CTGGTGGCAGCGAGGCGCC 655	

Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGGCGGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCC 95

Db 620 ATCAACATCCGCGCGGTGTGTCGCGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 561

Qy 96 CAGTTTCATGACAGAACACCCGCTGTGCGGGCTCACCCACAGCGCGCTGTGCGCG 155

Db 560 CAATTCATGACAGAACACCCGCTGTGCGGGTTGACCCACAGCGCGGACTGTGCGCG 501

Qy 156 CTGGCGCGGGTGTCTGTCTCCCGGAGCGGCGCGGGTGGAGGTCGCGAGCTGCACCCG 215

Db 500 CTGGGGCGCGCGGTCTGTACAGTGAGCGTGCCTGGGGTGGAGGTCGCGAGCTGCACCCG 441

Qy 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275

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Qy 276 GGCTCGCTGTGCGGTATGTCGCGGTCAACCGGTTTCGGGTTTCATCGAGACCCCGTACCGC 335

Db 380 GGCTCGCTGTGCGGTATGTCGCGGTCAACCGGTTTCGGGTTTCATCGAAACCCCGTACCGC 321

Qy 336 AAGTGTGTCGACGCGGTGTGTCACCGACGAGATCCACTACCTGACCGCGCAGAGAGGAC 395

Db 320 AAGTGTGTCGACGCGGTGTGTCACCGACGAGATCGTGTACCTGACCTGACCGCGCAGAGAGGAC 261

Qy 396 CGCCACGTGTGGCGCAGGCCAACTCCCGATCGACCAAGGGCGGTTTCGCGAGGCC 455

Db 260 CGCCACGTGTGGCGCAGGCCAACTTCGCCGATCGATCGGACGTCGTCGTCGAGCGC 201

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Qy 636 CTGGTCCGAGCGAGCGCC 655

Db 20 CTGGTCCGTAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGGCGGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCC 95

Db 1 ATCAACATCCGCGCGGTGTGTCGCGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 60

96 CAGTTTCATGACCAAGAACACCGCTGTGCGGCTCACCCACAAGCGCCCTGTGCGG 155  
Db |||  
61 CAATTATGACAGAACACCGCTGTGCGGCTGTGACCCACAAGCGCCACTGTGCGG 120  
Db |||  
156 CTGGGCGCGGCTGTGCTGTGCTGCGGAGCGCGCGGCTGAGGTGCGGACGTGACCG 215  
Db |||  
121 CTGGGCGCGGCTGTGCTGTGCTGAGCGTGTGCGGCTGAGGTGCGGACGTGACCG 180  
Db |||  
216 TCCTACTAGCGCGGATGTGCGGATCGAGACCGCGGAGGTGCCAATCGCTGTGATC 275  
Db |||  
181 TGCCTACTAGCGCGGATGTGCGGATCGAAGACCGCTGAGGCGCCCAACATCGCTGTGATC 240  
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276 GCGTCTGCTGCTGTGATGCGCGGCTCAACCGGTTTCGCGGTTTCATCGAGCGCGTACCG 335  
Db |||  
241 GCGTCTGCTGTGATGCGCGGCTCAACCGGTTTCGCGGTTTCATCGAAGCGCGTACCG 300  
Db |||  
336 AAGTGTGTCGACGCGGTGTGTCACCGAGATCCACTGACCGCGCGGACGAGGAGAC 395  
Db |||  
301 AAGTGTGTCGACGCGGTGTGTCACCGAGATCCGTTACCTGACCGCGGACGAGGAGAC 360  
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Db |||  
361 CGCCACGTGTGCGGACGCGGCTGCGGATCGAGGACGAGGCGGCTGCGGAGGCG 420  
Db |||  
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Db |||  
421 CGGTGTGCTGCTGCTGTGATGCGCGGCTCAACCGGTTTCGCGGTTTCATCGAAGCGCGTACCG 480  
Db |||  
516 TACATGACGTGTGCGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 575  
Db |||  
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Db |||  
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Db |||  
541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600  
Db |||  
636 CTGTGTGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 655  
Db |||  
601 CTGTGTGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG

## RESULT 13

US-09-655-378A-138/c  
; Sequence 138, Application US/09655378A  
; Patent No. 6673616

## GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.  
OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL  
STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

APPLICATION NUMBER: 05-09-655,378A

FILING DATE: 05-Sep-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

## TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

## Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

36 ATCAACATCCGTCAGTCTGTGCGGCGGATCAAGGAGTTCTTCGCGCACCGACGCTGTCC 95

620 ATCAACATCCGTCAGTCTGTGCGGCGGATCAAGGAGTTCTTCGCGCACCGACGCTGTCC 561

96 CAGTTTCATGACCAAGAACACCGCTGTGCGGCTCACCCACAAGCGCCCTGTGCGG 155

560 CAATTTCATGACCAAGAACACCGCTGTGCGGCTCACCCACAAGCGCCCTGTGCGG 501

156 CTGGGCGCGGCTGTGCTGTGCTGAGCGGCGGCTGAGGTGCGGACGTGACCG 215

500 CTGGGCGCGGCTGTGCTGTGCTGAGCGGCGGCTGAGGTGCGGACGTGACCG 441

216 TCCTACTAGCGCGGATGTGCGGCTCAAGACCGCGGAGGTTCCAAATCGGTCTGATC 275

440 TCGCTACTAGCGCGGATGTGCGGCTCAAGACCGCGGAGGTTCCAAATCGGTCTGATC 381

276 GCGTCTGTGCTGTGATGCGCGGCTCAACCGCTTCGCGGTTTCATCGAGACGCGTACCG 335

380 GCGTCTGTGCTGTGATGCGCGGCTCAACCGCTTCGCGGTTTCATCGAGACGCGTACCG 321

336 AAGTGTGTCGACGCGGTGTGTCACCGACGAGATCCACTACCTGACCGCGGACGAGGAG 395

320 AAGTGTGTCGACGCGGTGTGTCACCGACGAGATCCACTACCTGACCGCGGACGAGGAG 261

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200 CGGTGTGCTGTGCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 141

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140 TACATGACGTGTGCGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCT 81

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80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 655

636 CTGTGTGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 655

20 CTGTGTGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 1

## RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

GENERAL INFORMATION:

APPLICANT: Kaiser, Michael W.

APPLICANT: Lyamichev, Victor I.

APPLICANT: Lyamichev, Natasha

TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

NUMBER OF SEQUENCES: 190

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CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACCAGCGAGCTGTC 95
DB 1 ATCAATCCGCGCGGTGTCGCGCGATCAAGAGTCTTCGGCACCAGCGAGCTG 60
QY 96 CAGTTCATGACCAAGAACACCCGCTGTCGGGGTCAACAGAGTCTTCGGCACCAGCGAGCTG 155
DB 61 CAATTATGACCAAGAACACCCGCTGTCGGGGTCAACAGAGTCTTCGGCACCAGCGAGCTG 120
QY 156 CTGGGCGCGGTGTCGTCGCGGAGCGGCGGCTGAGGTCGCGGAGCTGCGGAGCTGACCCG 215
DB 121 CTGGGCGCGGCGGTCTGTCAGCTGAGGTCGCGGCTGAGGTCGCGGAGCTGCGGAGCTG 180
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTCGCCAATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCGCCAAATCGGTCTGATC 240
QY 276 GGCTCGCTGTCGGTGATGCGGGGTCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGC 335

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACCAGCGAGCTGTC 95
DB 1 ATCAATCCGCGCGGTGTCGCGCGATCAAGAGTCTTCGGCACCAGCGAGCTG 60
QY 96 CAGTTCATGACCAAGAACACCCGCTGTCGGGGTCAACAGAGTCTTCGGCACCAGCGAGCTG 155
DB 61 CAATTATGACCAAGAACACCCGCTGTCGGGGTCAACAGAGTCTTCGGCACCAGCGAGCTG 120
QY 156 CTGGGCGCGGTGTCGTCGCGGAGCGGCGGCTGAGGTCGCGGAGCTGCGGAGCTGACCCG 215
DB 121 CTGGGCGCGGCGGTCTGTCAGCTGAGGTCGCGGCTGAGGTCGCGGAGCTGCGGAGCTG 180
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTCGCCAATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCGCCAAATCGGTCTGATC 240
QY 276 GGCTCGCTGTCGGTGATGCGGGGTCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGC 335
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Db      241 GGCTCGCTGTCTGTTAGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 300
QY      336 AAGGTGGTTCGACGGGCTGGTCAACCGACGAGATCCACTACTGACCGCCGACGAGGAGAC 395
Db      301 AAGGTGGTTCGACGGGCTGGTTCAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC 360
QY      396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCGGTTTCGCGAGGCC 455
Db      361 CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG 420
QY      456 CGGTGCTGTGTCGCGCGCAAGCGCGGCGAGGTGCGAGTACGTCCCTTCGTCCGAGGTGGAC 515
Db      421 CGCGTGTCTGGTCCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY      516 TACATGGACGTGTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
Db      481 TACATGGACGTCTCGCCCGCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540
QY      576 GAGCACGACGACGCCCAACCGTGCCCTGATGGGCGCCAAACATGACGCGCCAGGCGGTTCGG 635
Db      541 GAGCACGACGACGCCCAACCGTGCCCTCATGGGGGCAACATGACGCGCCAGGCGGTTCGG 600
QY      636 CTGGTGGCGCAGGAGGCCCC 655
Db      601 CTGGTCCGTAGCGAGGCCCC 620

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Search completed: August 19, 2004, 14:46:16  
 Job time : 80.4446 secs

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Result No.	Score	Query %		DB	ID	Description
		Match	Length			
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2	705	100.0	705	9	US-09-285-306-5	Sequence 5, Appli
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4	705	100.0	705	9	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	9	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	9	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	9	US-09-285-306-12	Sequence 12, Appli
8	705	100.0	705	9	US-09-285-306-13	Sequence 13, Appli
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11	705	100.0	705	9	US-09-285-306-24	Sequence 24, Appli
12	703.4	99.8	705	9	US-09-285-306-17	Sequence 17, Appli
13	695	98.6	705	9	US-09-285-306-3	Sequence 3, Appli
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	QY	241	TGAGACCCCGAGGGTCCAACTCGCTTGATCGGCTCGCTGCTGATGCGCGGG	300
	Dd	241	TGAGACCCCGAGGGTCCAACTCGCTTGATCGGCTCGCTGCTGATGCGCGGG	300
	QY	301	TCAAACCGTTCCGGTTCATTCGAGACGCGGTACCGAAGGTGGTTCGATCACCG	360
	Dd	301	TCAAACCGTTCCGGTTCATTCGAGACGCGGTACCGAAGGTGGTTCGATCACCG	360
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	Dd	361	ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTGGTGGCGAGGCCAACT	420
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	Dd	421	CGCCGATCGACACAAGGCGCGTTTCGCGAGGCGCGGTTCTGGTCCGCGAAGCGG	480
	QY	481	GCGAGTTCAGTACGTGCGCTCGTTCGAGGTGGAATCATGACGTGTGCGCGCCAGA	540
	Dd	481	GCGAGTTCAGTACGTGCGCTCGTTCGAGGTGGAATCATGACGTGTGCGCGCCAGA	540
	QY	541	TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGACACGACGCCAACCGTGCCC	600
	Dd	541	TGGTTCGCTGCGCCACCGCGATGATCCGTTCTCGACACGACGCCAACCGTGCCC	600
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	Dd	601	TGATGGCGCCAACTGACGCGCGAGGCGGTTCCGCTGGTGGCAGGCGCGCTGG	660
	QY	661	TGGGCACCGCATGGAGCTGCGCGCGCGATCGAGCGCGACGT	705
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	US-09-285-306-5			
	; Sequence 5, Application US/09285306A			
	; Publication No. US20020187467A1			
	; GENERAL INFORMATION:			
	; APPLICANT: Gingeras, Thomas			
	; APPLICANT: Drenkow, Jorg			
	; APPLICANT: Affymetrix, Inc.			
	; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
	; FILE REFERENCE: 018547-018570US			
	; CURRENT APPLICATION NUMBER: US/09/285,306A			
	; EARLIER FILING DATE: 1999-04-02			
	; EARLIER APPLICATION NUMBER: US 60/080,616			
	; EARLIER FILING DATE: 1998-04-03			
	; NUMBER OF SEQ ID NOS: 181			
	; SOFTWARE: FastSEQ for Windows Version 3.0			
	; SEQ ID NO 5			
	; LENGTH: 705			
	; TYPE: DNA			
	; ORGANISM: Mycobacterium avium			
	US-09-285-306-5			
	Query Match 100.0%; Score 705; DB 9; Length 705;			
	Best Local Similarity 100.0%; Pred. No. 2.1e-154;			
	Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
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	Dd	1	CCGAGGAGTGGAGCGCATCACCGCAGACCCTGATCAACATCCGTCAGTGGCGG	60
	QY	61	CGATCAAGAGTTCCTTCGGCACCGCAGCGTGTCCCAAGTTTCATGGACCAACCCGC	120
	Dd	61	CGATCAAGAGTTCCTTCGGCACCGCAGCGTGTCCCAAGTTTCATGGACCAACCCGC	120
	QY	121	TGTCGGGCGCTCACCACAAGCGCGCTGTCGGCGCTGGCCCCGGTGGTCTGTCCCGG	180

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 QY 181 AGCGGGCGGGCTGGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGSCCGGA 240  
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 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTATGCGGG 300  
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 QY 301 TCAACCGGTCGGGTTCTATCGAGACCGCTACCGAAGGTGGTCAAGCGGTGTCACCG 360  
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 QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420  
 Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420  
 QY 421 CGCGATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCAAGGGCG 480  
 Db 421 CGCGATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCAAGGGCG 480  
 QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTTGGAATCATGACGCTGTCGCGCGCGAGA 540  
 Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTTGGAATCATGACGCTGTCGCGCGCGAGA 540  
 QY 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600  
 Db 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600  
 QY 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 Db 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 QY 661 TGGGACCGGATGGAGTGGCGCGCGGATCGACGCGGCGACGT 705  
 Db 661 TGGGACCGGATGGAGTGGCGCGCGGATCGACGCGGCGACGT 705

RESULT 4

US-09-285-306-7  
 ; Sequence 7, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1999-04-03  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 7  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
 Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
 QY 61 CGATCAAGGAGTCTTCGGCACCGACGAGCTGCCAGTTCATGGACCAACACCGCGC 120

Db 61 CGATCAAGGAGTCTTCGGCACCGACGAGTTCCTCCAGTTCATGGACCAACACCGCGC 120  
 QY 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180  
 Db 121 TGTGGGCTCACCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180  
 QY 181 AGCGGGCGGGCTGGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGSCCGGA 240  
 Db 181 AGCGGGCGGGCTGGAGTCCGACAGTGCACCGTCCCACTACGCGCGGATGSCCGGA 240  
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTATGCGGG 300  
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGCTGTATGCGGG 300  
 QY 301 TCAACCGGTCGGGTTCTATCGAGACCGCTACCGAAGGTGGTCAAGCGGTGTCACCG 360  
 Db 301 TCAACCGGTCGGGTTCTATCGAGACCGCTACCGAAGGTGGTCAAGCGGTGTCACCG 360  
 QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420  
 Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420  
 QY 421 CGCGATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCAAGGGCG 480  
 Db 421 CGCGATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCAAGGGCG 480  
 QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTTGGAATCATGACGCTGTCGCGCGCGAGA 540  
 Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTTGGAATCATGACGCTGTCGCGCGCGAGA 540  
 QY 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600  
 Db 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600  
 QY 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 Db 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660  
 QY 661 TGGGACCGGATGGAGTGGCGCGCGGATCGACGCGGCGACGT 705  
 Db 661 TGGGACCGGATGGAGTGGCGCGCGGATCGACGCGGCGACGT 705

RESULT 5

US-09-285-306-8  
 ; Sequence 8, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1999-04-03  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60  
 Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCTCCAGTTCTATGGACCAAGAACACCCGC 120  
 Db 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCTCCAGTTCTATGGACCAAGAACACCCGC 120  
 QY 121 TGTTCGGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGGTGTCTGTCCCGGG 180  
 Db 121 TGTTCGGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGGTGTCTGTCCCGGG 180  
 QY 181 AGCGGGCGGGCTGAGAGTCCGGACGTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
 Db 181 AGCGGGCGGGCTGAGAGTCCGGACGTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
 QY 241 TCAGACCCCGGAGGTGCCAATCGTCTGATCGGCTCGTGTCTGATGTCGGCGGG 300  
 Db 241 TCAGACCCCGGAGGTGCCAATCGTCTGATCGGCTCGTGTCTGATGTCGGCGGG 300  
 QY 301 TCAACCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGCGTGTCAACG 360  
 Db 301 TCAACCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGCGTGTCAACG 360  
 QY 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTGGTGGCGCAAGCCAACT 420  
 Db 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTGGTGGCGCAAGCCAACT 420  
 QY 421 CGCGGATCGACGACGAGGCGGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480  
 Db 421 CGCGGATCGACGACGAGGCGGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480  
 QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCGAGGTGGACTATATGGAGTGTCTCCCGCGCCAGA 540  
 Db 481 GCGAGGTCGAGTACGTGCTCCCTCGTCGAGGTGGACTATATGGAGTGTCTCCCGCGCCAGA 540  
 QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCCTG 600  
 Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCCTG 600  
 QY 601 TGATGGCGCCCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCGTGG 660  
 Db 601 TGATGGCGCCCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCGTGG 660  
 QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705  
 Db 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705

RESULT 6

US-09-285-306-9  
 ; Sequence 9, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 9  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60

Db 1 CCCAGGAGCTGGAGGCGATCACACCGAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60  
 QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCTCCAGTTCTATGGACCAAGAACACCCGC 120  
 Db 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCTCCAGTTCTATGGACCAAGAACACCCGC 120  
 QY 121 TGTTCGGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGGTGTCTGTCCCGGG 180  
 Db 121 TGTTCGGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGGTGTCTGTCCCGGG 180  
 QY 181 AGCGGGCGGGCTGAGAGTCCGGACGTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
 Db 181 AGCGGGCGGGCTGAGAGTCCGGACGTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240  
 QY 241 TCAGACCCCGGAGGTGCCAATCGTCTGATCGGCTCGTGTCTGATGTCGGCGGG 300  
 Db 241 TCAGACCCCGGAGGTGCCAATCGTCTGATCGGCTCGTGTCTGATGTCGGCGGG 300  
 QY 301 TCAACCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGCGTGTCAACG 360  
 Db 301 TCAACCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGCGTGTCAACG 360  
 QY 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTGGTGGCGCAAGCCAACT 420  
 Db 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTGGTGGCGCAAGCCAACT 420  
 QY 421 CGCGGATCGACGACGAGGCGGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480  
 Db 421 CGCGGATCGACGACGAGGCGGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480  
 QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCGAGGTGGACTATATGGAGTGTCTCCCGCGCCAGA 540  
 Db 481 GCGAGGTCGAGTACGTGCTCCCTCGTCGAGGTGGACTATATGGAGTGTCTCCCGCGCCAGA 540  
 QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCCTG 600  
 Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGCCTG 600  
 QY 601 TGATGGCGCCCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCGTGG 660  
 Db 601 TGATGGCGCCCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCGTGG 660  
 QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705  
 Db 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGAGCT 705

RESULT 7

US-09-285-306-12  
 ; Sequence 12, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 12  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;  
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db 1 CCCAGGAGTGGAGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTTCGGCAGCCAGCAGCTGTCCAGTTTATGACACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTTCGGCAGCCAGCAGCTGTCCAGTTTATGACACAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCGCTGGGCCGGGTGTCTGTCCCGGG 180  
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCGCTGGGCCGGGTGTCTGTCCCGGG 180  
QY 181 AGCGGGCGGGCTGAGGTTCGCGAGCTGACCCGCTCCCACTACGCGCGGATGTCGCCGA 240  
Db 181 AGCGGGCGGGCTGAGGTTCGCGAGCTGACCCGCTCCCACTACGCGCGGATGTCGCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGCTATGCGCGGG 300  
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGCTATGCGCGGG 300  
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGCTGAGCGCGTGGTCAACG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGCTGAGCGCGTGGTCAACG 360  
QY 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTGGCGGAGGCAACT 420  
Db 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTGGCGGAGGCAACT 420  
QY 421 CGCCGATCGACGAAGAGCGCGTTTCGGGAGGCGCGGTGCTGTCGCGCGCAAGGGGG 480  
Db 421 CGCCGATCGACGAAGAGCGCGTTTCGGGAGGCGCGGTGCTGTCGCGCGCAAGGGGG 480  
QY 481 GCGAGTTCGAGTACGTCCTGTCGAGGTGGACTACATGACAGCTGTGCGCGCCAGA 540  
Db 481 GCGAGTTCGAGTACGTCCTGTCGAGGTGGACTACATGACAGCTGTGCGCGCCAGA 540  
QY 541 TGGTTCGTTGGTCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGTCGCC 600  
Db 541 TGGTTCGTTGGTCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGTCGCC 600  
QY 601 TGATGGCGCCAAATGATGACGCCAGCGGTTCCGCTGTCGAGCGAGGCGCGCTGG 660  
Db 601 TGATGGCGCCAAATGATGACGCCAGCGGTTCCGCTGTCGAGCGAGGCGCGCTGG 660  
QY 661 TGGGACCGGCATGAGTTCGCGCGCGGATCGACGCGCGGACGT 705  
Db 661 TGGGACCGGCATGAGTTCGCGCGCGGATCGACGCGCGGACGT 705

RESULT 8  
US-09-285-306-13  
; Sequence 13, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 13  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-13

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;  
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
Db 1 CCCAGGAGTGGAGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60  
QY 61 CGATCAAGGAGTCTTTCGGCAGCCAGCAGCTGTCCAGTTTATGACACAGAACACCCGC 120  
Db 61 CGATCAAGGAGTCTTTCGGCAGCCAGCAGCTGTCCAGTTTATGACACAGAACACCCGC 120  
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCGCTGGGCCGGGTGTCTGTCCCGGG 180  
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCGCTGGGCCGGGTGTCTGTCCCGGG 180  
QY 181 AGCGGGCGGGCTGAGGTTCGCGAGCTGACCCGCTCCCACTACGCGCGGATGTCGCCGA 240  
Db 181 AGCGGGCGGGCTGAGGTTCGCGAGCTGACCCGCTCCCACTACGCGCGGATGTCGCCGA 240  
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGCTATGCGCGGG 300  
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGCTATGCGCGGG 300  
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGCTGAGCGCGTGGTCAACG 360  
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGCTGAGCGCGTGGTCAACG 360  
QY 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTGGCGGAGGCAACT 420  
Db 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTCGTGGCGGAGGCAACT 420  
QY 421 CGCCGATCGACGAAGAGCGCGTTTCGGGAGGCGCGGTGCTGTCGCGCGCAAGGGGG 480  
Db 421 CGCCGATCGACGAAGAGCGCGTTTCGGGAGGCGCGGTGCTGTCGCGCGCAAGGGGG 480  
QY 481 GCGAGTTCGAGTACGTCCTGTCGAGGTGGACTACATGACAGCTGTGCGCGCCAGA 540  
Db 481 GCGAGTTCGAGTACGTCCTGTCGAGGTGGACTACATGACAGCTGTGCGCGCCAGA 540  
QY 541 TGGTTCGTTGGTCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGTCGCC 600  
Db 541 TGGTTCGTTGGTCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGTCGCC 600  
QY 601 TGATGGCGCCAAATGATGACGCCAGCGGTTCCGCTGTCGAGCGAGGCGCGCTGG 660  
Db 601 TGATGGCGCCAAATGATGACGCCAGCGGTTCCGCTGTCGAGCGAGGCGCGCTGG 660  
QY 661 TGGGACCGGCATGAGTTCGCGCGCGGATCGACGCGCGGACGT 705  
Db 661 TGGGACCGGCATGAGTTCGCGCGCGGATCGACGCGCGGACGT 705

RESULT 9  
US-09-285-306-14  
; Sequence 14, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; EARLIER FILING DATE: 1999-04-02  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 14  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-14

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Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTCTCGGCACACGAGCCAGTGTCCAGTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGAGGATCTTCTCGGCACACGAGCCAGTGTCCAGTTCATGGACAGAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCGAGACGTGCACCCGTCCTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCGAGACGTGCACCCGTCCTCCACTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCGACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCGACGTCGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGCAAGGCGCGGTTTCGCGAGGCGCGGTCGTGGTTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGCAAGGCGCGGTTTCGCGAGGCGCGGTCGTGGTTCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCAGA 540

Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCAACCGTCCGC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCAACCGTCCGC 600

Qy 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCCGTCGTGGTTCGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCCGTCGTGGTTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

RESULT 10

```

US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA

```

RESULT 11

```

US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

```

```

; ORGANISM: Mycobacterium avium
US-09-285-306-16

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTCTCGGCACACGAGCCAGTGTCCAGTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGAGGATCTTCTCGGCACACGAGCCAGTGTCCAGTTCATGGACAGAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCGAGACGTGCACCCGTCCTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCGAGACGTGCACCCGTCCTCCACTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCGACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCGACGTCGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGCAAGGCGCGGTTTCGCGAGGCGCGGTCGTGGTTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGCAAGGCGCGGTTTCGCGAGGCGCGGTCGTGGTTCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCAGA 540

Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCAACCGTCCGC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCAACCGTCCGC 600

Qy 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCCGTCGTGGTTCGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCCGTCGTGGTTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

```
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCATCGTGGCGG 60
Db |
Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCATCGTGGCGG 60
Db |
Qy 61 CGATCAAGGAGTTCTTGGGACACGACCGAGCTGTCCAGTTTCATGACACGACACCCGC 120
Db |
Qy 61 CGATCAAGGAGTTCTTGGGACACGACCGAGCTGTCCAGTTTCATGACACGACACCCGC 120
Db |
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db |
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db |
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db |
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db |
Qy 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGGCGGG 300
Db |
Qy 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGGCGGG 300
Db |
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTCAAGCGGTGGTCAACG 360
Db |
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTCAAGCGGTGGTCAACG 360
Db |
Qy 361 ACAGATCCACTACTCTGACCCCGACGAGGAGGACCGCAAGTGGTGGCGAGGCGCAACT 420
Db |
Qy 361 ACAGATCCACTACTCTGACCCCGACGAGGAGGACCGCAAGTGGTGGCGAGGCGCAACT 420
Db |
Qy 421 CGCGATCGACGACAAAGGGCGGGTTCGGGAGGCGCGGTGGTGGTGGCGAGGCGG 480
Db |
Qy 421 CGCGATCGACGACAAAGGGCGGGTTCGGGAGGCGCGGTGGTGGTGGCGAGGCGG 480
Db |
Qy 481 GCGAGTCCGATACGTGCGCTCGTCCGAGTGGACTACATGACGTGTCGCGCGCCAGA 540
Db |
Qy 481 GCGAGTCCGATACGTGCGCTCGTCCGAGTGGACTACATGACGTGTCGCGCGCCAGA 540
Db |
Qy 541 TGGTGTGGTGGCGACACCGCATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGGCC 600
Db |
Qy 541 TGGTGTGGTGGCGACACCGCATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGGCC 600
Db |
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGGTGGCGAGCGAGGCGCGCTGG 660
Db |
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGGTGGCGAGCGAGGCGCGCTGG 660
Db |
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db |
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db |

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCATCGTGGCGG 60
Db |
Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCATCGTGGCGG 60
Db |
Qy 61 CGATCAAGGAGTTCTTGGGACACGACCGAGCTGTCCAGTTTCATGACACGACACCCGC 120
Db |
Qy 61 CGATCAAGGAGTTCTTGGGACACGACCGAGCTGTCCAGTTTCATGACACGACACCCGC 120
Db |
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db |
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db |
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db |
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db |
Qy 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGGCGGG 300
Db |
Qy 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGGCGGG 300
Db |
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTCAAGCGGTGGTCAACG 360
Db |
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTCAAGCGGTGGTCAACG 360
Db |
Qy 361 ACAGATCCACTACTCTGACCCCGACGAGGAGGACCGCAAGTGGTGGCGAGGCGCAACT 420
Db |
Qy 361 ACAGATCCACTACTCTGACCCCGACGAGGAGGACCGCAAGTGGTGGCGAGGCGCAACT 420
Db |
Qy 421 CGCGATCGACGACAAAGGGCGGGTTCGGGAGGCGCGGTGGTGGTGGCGAGGCGG 480
Db |
Qy 421 CGCGATCGACGACAAAGGGCGGGTTCGGGAGGCGCGGTGGTGGTGGCGAGGCGG 480
Db |
Qy 481 GCGAGTCCGATACGTGCGCTCGTCCGAGTGGACTACATGACGTGTCGCGCGCCAGA 540
Db |
Qy 481 GCGAGTCCGATACGTGCGCTCGTCCGAGTGGACTACATGACGTGTCGCGCGCCAGA 540
Db |
Qy 541 TGGTGTGGTGGCGACACCGCATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGGCC 600
Db |
Qy 541 TGGTGTGGTGGCGACACCGCATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGGCC 600
Db |
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGGTGGCGAGCGAGGCGCGCTGG 660
Db |
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGGTGGCGAGCGAGGCGCGCTGG 660
Db |
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db |
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db |

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 705
;   TYPE: DNA
;   ORGANISM: Mycobacterium avium
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (525)...(525)
;   OTHER INFORMATION: n = g,a,c or t
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (650)...(650)
;   OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1  CCGAGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60
Db 1  CCGAGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTCGCGCACCGACGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTCTTCGCGCACCGACGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGGGGGTACCCACAAGCGCGCTGTGCGGCTGGCCCGGGTGTCTGTCTCCCGGG 180
Db 121 TGTGGGGGTACCCACAAGCGCGCTGTGCGGCTGGCCCGGGTGTCTGTCTCCCGGG 180
Qy 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCCTCCACTAGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCCTCCACTAGCGCGGATGTGCCGA 240
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCTGTATGCGCGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCTGTATGCGCGG 300
Qy 301 TCAACCGGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTCAACCG 360
Db 301 TCAACCGGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTCAACCG 360
Qy 361 ACCGATCCACTACCTACCGCGACGAGGAGACCGCCACGTCGTGTGGCGCAGGCCAACT 420
Db 361 ACCGATCCACTACCTACCGCGACGAGGAGACCGCCACGTCGTGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGTGTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCTGCTGTCGAGTGGACTACATGGACNTKTCSCCGCGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCTGCTGTCGAGTGGACTACATGGACNTKTCSCCGCGCCARA 540
Qy 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 600
Qy 601 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 660
Db 601 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 660
Qy 661 TGGGACCGGCATGGAGTGTGCGCGCGCGATTCGACGCGGCGAGCT 705
Db 661 TGGGACCGGCATGGAGTGTGCGCGCGCGATTCGACGCGGCGAGCT 705
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RESULT 14

US-09-285-306-11

; Sequence 11, Application US/09285306A

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-01.8570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 11
;   LENGTH: 705
;   TYPE: DNA
;   ORGANISM: Mycobacterium avium
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (42)...(42)
;   OTHER INFORMATION: n = g,a,c or t
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (692)...(692)
;   OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11
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Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1  CCGAGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60
Db 1  CCGAGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTCGCGCACCGACGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTCTTCGCGCACCGACGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGGGGGTACCCACAAGCGCGCTGTGCGGCTGGCCCGGGTGTCTGTCTCCCGGG 180
Db 121 TGTGGGGGTACCCACAAGCGCGCTGTGCGGCTGGCCCGGGTGTCTGTCTCCCGGG 180
Qy 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCCTCCACTAGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGACCCGTCCTCCACTAGCGCGGATGTGCCGA 240
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCTGTATGCGCGGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCTGTATGCGCGGG 300
Qy 301 TCAACCGGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTCAACCG 360
Db 301 TGAACCGGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTGACGCGGTGTCAACCG 360
Qy 361 ACCGATCCACTACCTACCGCGACGAGGAGACCGCCACGTCGTGTGGCGCAGGCCAACT 420
Db 361 ACCGATCCACTACCTACCGCGACGAGGAGACCGCCACGTCGTGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGGCGGTTTCGCGAGGCGCGGGTGTCTGTGTCGCGCGCAAGGCGG 480
Qy 481 GCGAGTTCGAGTACGTGCTGCTGTCGAGTGGACTACATGGACNTKTCSCCGCGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCTGCTGTCGAGTGGACTACATGGACNTKTCSCCGCGCCARA 540
Qy 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 600
Db 541 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 600
Qy 601 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 660
Db 601 TGGTGTGCGTGGCCACCGGATGATCCCGTTCTCTCGAGCACGACGACGACCAACCGTGCCC 660
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Db 601 TGATGGGGCCCAACATGCAGCGCCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660  
Qy 661 TGGGACCGGCATGGAGTGTGGCGCGCGCATGCGACGCGGCGACGT 705  
Db 661 TGGGACCGGCATGGAGTGTGGCGCGCGCATGCGACGCGGCGACGT 705  
Db 661 TGGGACCGGCATGGAGTGTGGCGCGCGCATGCGACGCGGCGACGT 705  
RESULT 15  
US-09-306-10  
; Sequence 10, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;  
Best Local Similarity 98.0%; Pred. No. 3,7e-151;  
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60  
Db 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCGTGGCGG 60  
Qy 61 CGATCAGGAGTCTTCGGACCCAGCAGCTGTCCAGTTTCATGACAGAACACCCGC 120  
Db 61 CGATCAGGAGTCTTCGGACCCAGCAGCTGTCCAGTTTCATGACAGAACACCCGC 120  
Qy 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGGCGCTGGCGCGGGTGTCTGTCCCGGG 180  
Db 121 TGTGGGGTCTGACCCACAAGCGCCGCTGTGGCGCTGGCGCGGGTGTCTGTCCCGGG 180  
Qy 181 AGCGGGCCGGGCTGAGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGTGCCCGA 240  
Db 181 AGCGGGCCGGGCTGAGTCCGCGACGTGCAACCGTCCCACTACGCGCGGATGTGCCCGA 240  
Qy 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGGCGGG 300  
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGGCGGG 300  
Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACGCGGTGTACCG 360  
Db 301 TSAACCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGACGCGGTGTACCG 360  
Qy 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420  
Db 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420  
Qy 421 CGCGATCGAGACAGGCGCGTTCGCGAGGCGCGGTCGTGTCGCGCGCAAGGCGG 480  
Db 421 CGCGATCGAGACAGGCGCGTTCGAGGAGKCCCGGTCGTGTCGCGCGCAAGGCGG 480  
Qy 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGACTACATGACGTGTGCGCGGCCAGA 540  
Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGACTACATGACGTGTGCGCGGCCAGA 540  
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACCCCAACCGTGCCC 600  
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCACGACGACCCCAACCGTGCCC 600

Qy 601 TGATGGGGCCCAACATGCAGCGCCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660  
Db 601 TGATGGGGCCCAACATGCAGCGCCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660  
Qy 661 TGGGACCGGCATGGAGTGTGGCGCGCGCATGCGACGCGGCGACGT 705  
Db 661 TGGGACCGGCATGGAGTGTGGCGCGCGCATGCGACGCGGCGACGT 705

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Job time : 408.972 secs

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-10  
Perfect score: 705  
Sequence: 1 cccagcagctggaggatc.....ggcgatcgagcgagcgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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2: /cgn2\_6/ptodata/2/ina/5B COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A COMB.seq: \*  
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6: /cgn2\_6/ptodata/2/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	606.6	86.0	706	3	US-08-797-812-24
2	599	85.0	4403765	3	US-09-103-840A-2
3	599	85.0	411529	3	US-09-103-840A-1
4	563.8	80.0	3447	2	US-08-313-185-57
5	563.8	80.0	3447	3	US-09-082-614A-57
6	536.4	76.1	970	1	US-08-250-030-1
7	536.4	76.1	970	5	PCT-US95-06790-1
8	526.4	74.7	620	2	US-08-757-653-135
9	526.4	74.7	620	2	US-08-757-653-138
10	526.4	74.7	620	4	US-08-520-946-135
11	526.4	74.7	620	4	US-08-520-946-138
12	526.4	74.7	620	4	US-09-655-378A-135
13	526.4	74.7	620	4	US-09-655-378A-138
14	524.8	74.4	620	2	US-08-757-653-136
15	524.8	74.4	620	2	US-08-757-653-137
16	524.8	74.4	620	2	US-08-757-653-139
17	524.8	74.4	620	2	US-08-757-653-140
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20	524.8	74.4	620	4	US-08-520-946-139
21	524.8	74.4	620	4	US-08-520-946-140
22	524.8	74.4	620	4	US-09-655-378A-136
23	524.8	74.4	620	4	US-09-655-378A-137
24	524.8	74.4	620	4	US-09-655-378A-139
25	524.8	74.4	620	4	US-09-655-378A-140
26	460.6	65.3	706	3	US-08-797-812-25
27	373.2	52.9	4074	4	US-09-252-991A-4737

28	373.2	52.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	338	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	338	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	291.8	41.4	432	2	US-08-313-185-59	Sequence 59, Appl
32	291.8	41.4	432	3	US-09-082-614A-59	Sequence 59, Appl
33	279	39.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	279	39.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
36	264	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
37	264	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
38	250.8	35.6	1830121	4	US-09-557-884-1	Sequence 1, Appli
39	250.8	35.6	1830121	4	US-09-643-990A-1	Sequence 1, Appli
40	250.4	35.5	319	4	US-08-750-088A-35	Sequence 35, Appl
41	250.4	35.5	319	4	US-09-722-319-35	Sequence 35, Appl
42	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App
43	246.4	35.0	14672	4	US-08-961-527-111	Sequence 111, App
44	244.4	34.7	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	225.6	32.0	329	4	US-08-750-088A-34	Sequence 34, Appl

## ALIGNMENTS

RESULT 1  
US-08-797-812-24  
; Sequence 24, Application US/08797812  
; Patent No. 6228575  
; GENERAL INFORMATION:  
; APPLICANT: Gingeras, Thomas A.  
; APPLICANT: Mack, David  
; APPLICANT: Chee, Mark S.  
; APPLICANT: Berno, Anthony J.  
; APPLICANT: Stryer, Lubert  
; APPLICANT: Ghandour, Ghassan  
; APPLICANT: Wang, Ching  
; TITLE OF INVENTION: Chip-Based Species Identification and  
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms  
; NUMBER OF SEQUENCES: 36  
; CORRESPONDENCE ADDRESS:  
; ADDRESSER: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC Compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/797,812  
; FILING DATE: 07-FEB-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/017,765  
; FILING DATE: 15-MAY-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/629,031  
; FILING DATE: 08-APR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/012,631  
; FILING DATE: 01-MAR-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/011,339  
; FILING DATE: 08-FEB-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitts, Renee A.  
; REGISTRATION NUMBER: 35,136  
; REFERENCE/DOCKET NUMBER: 16528X-018550  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-326-2400  
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 706 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: cDNA  
 ; -797-812-24

Query Match 86.0%; Score 606.6; DB 3; Length 706;  
 Best Local Similarity 90.6%; Pred. No. 3.6e-111;  
 Matches 639; Conservative 6; Mismatches 60; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCGTCGCGG 60  
 DB 2 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCGTCGCGG 61  
 QY 61 CGATCAAGGAGTCTTTCGGACCAAGCCAGCTGTCCAGTTCATGACCAAGCAACCCG 120  
 DB 62 CGATCAAGGAGTCTTTCGGACCAAGCCAGCTGTCCAGTTCATGACCAAGCAACCCG 121  
 QY 121 TGTCCGGTCTGACCCCAAGCCGCTGTCCGGCTTGGGCTGGGCTGGGCTGGGCTGGG 180  
 DB 122 TGTCCGGTCTGACCCCAAGCCGCTGTCCGGCTTGGGCTGGGCTGGGCTGGGCTGGG 181  
 QY 181 AGCGGCGGCTGGAGTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 240  
 DB 182 AGCGTCCGGCTGGAGTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 241  
 QY 241 TCGAGACCCGAGGCTCCCAACATCGCTGTGATCGGCTCGCTGTGATCGGCTCGCT 300  
 DB 242 TCGAACCCTTGGAGGCGCCCAACATCGCTGTGATCGGCTCGCTGTGATCGGCTCGCT 301  
 QY 301 TSAACCCGCTTCGGTTCATCGAGACCCGCTACCGCAAGGTGGTCAAGCTGTGTCACCG 360  
 DB 302 TCAACCCGCTTCGGTTCATCGAAGCCGCTACCGCAAGGTGGTCAAGCTGTGTCACCG 361  
 QY 361 ACAGATCCACTACTGACCCGCGCAGCAGGAGGACCGCAGTGTGGTGGTGGTGGTGGT 420  
 DB 362 ACAGATCCACTACTGACCCGCGCAGCAGGAGGACCGCAGTGTGGTGGTGGTGGTGGT 421  
 QY 421 CGCGATCGACGACAGGCGCGGTTCGAGGAGKCCCGGCTCGTCCGCGGAGCGG 480  
 DB 422 CGCGATCGATCGGACCGGCTCGTTCGAGGCGCGGCTCGTCCGCGGAGCGG 481  
 QY 481 GCGAGTCTGAGTACGTGCGCTCGTCCGAGTGGACTATCATGACGCTCTCGCCGCGCAG 540  
 DB 482 GCGAGTCTGAGTACGTGCGCTCGTCCGAGTGGACTATCATGACGCTCTCGCCGCGCAG 541  
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGC 600  
 DB 542 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGC 601  
 QY 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTCGAGCAGGCGCGCTGG 660  
 DB 602 TCATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTCGAGCAGGCGCGCTGG 661  
 QY 661 TGGGCACCGGATGGAGTGGCGCGGCGATCGAGCGCGGACGCT 705  
 DB 662 TGGGCACCGGATGGAGTGGCGCGGCGATCGAGCGCGGACGCT 706

RESULT 2  
 US-09-103-840A-2  
 ; Sequence 2, Application US/09103840A  
 ; Patent No. 6294328  
 ; GENERAL INFORMATION:  
 ; APPLICANT: FLEISCHMAN, Robert D.  
 ; APPLICANT: WHITE, Owen R.  
 ; APPLICANT: FRASER, Claire M.  
 ; APPLICANT: VENTER, John C.  
 ; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
 ; TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00  
 ; CURRENT APPLICATION NUMBER: US/09/103,840A  
 ; CURRENT FILING DATE: 1998-06-24  
 ; NUMBER OF SEQ ID NOS: 2  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 2  
 ; LENGTH: 4403765  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium tuberculosis  
 ; FEATURE:  
 ; OTHER INFORMATION: CDC 1551  
 ; OTHER INFORMATION: "n" bases at various positions throughout the sequence  
 ; OTHER INFORMATION: represent a, t, c or g  
 US-09-103-840A-2

Query Match 85.0%; Score 599; DB 3; Length 4403765;  
 Best Local Similarity 90.4%; Pred. No. 1.8e-109;  
 Matches 632; Conservative 6; Mismatches 61; Indels 0; Gaps 0;  
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCGTCGTCGTCGCGG 60  
 DB 762963 CCAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCGTCGTCGTCGCGG 763022  
 QY 61 CGATCAAGGAGTCTTTCGGACCAAGCCAGCTGTCCAGTTCATGACCAAGCAACCCG 120  
 DB 763023 CGATCAAGGAGTCTTTCGGACCAAGCCAGCTGTAGCCAAATTCATGACCAAGCAACCCG 763082  
 QY 121 TGTCCGGTCTGACCCCAAGCGCGCTGTCCGGCTTGGGCTGGGCTGGGCTGGGCTGGG 180  
 DB 763083 TGTCCGGTCTGACCCCAAGCGCGCTGTCCGGCTTGGGCTGGGCTGGGCTGGGCTGGG 763142  
 QY 181 AGCGGCGGCTTGGAGTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 240  
 DB 763143 AGCGTCCGGCTTGGAGTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 763202  
 QY 241 TCGAGACCCGCGGCTTCCCAACATCGCTGTGATCGGCTCGCTGTGCTGTGCTGTGCTGT 300  
 DB 763203 TCGAACCCTTGGAGGCGCCCAACATCGCTGTGATCGGCTCGCTGTGCTGTGCTGTGCT 763262  
 QY 301 TSAACCCGCTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGAGTGTGCTACCG 360  
 DB 763263 TCAACCCGCTTCCGGTTCATCGAACCCTGTAACCGCAAGGTGGTTCGAGCGGCTGTGCTAGCG 763322  
 QY 361 ACAGATCCACTACTGACCCGCGCAGCAGGAGGACCGCAGTGTGGTGGTGGTGGTGGT 420  
 DB 763323 ACAGATCCACTACTGACCCGCGCAGCAGGAGGACCGCAGTGTGGTGGTGGTGGTGGT 763382  
 QY 421 CGCGATCGACGACAGGCGCGGTTCGAGGAGKCCCGGCTCGTCCGCGGAGCGG 480  
 DB 763383 CGCGATCGATCGGACCGGCTCGCTTCGTCGAGCAGCAGCAGCAGCAGCAGCAGCAG 763442  
 QY 481 GCGAGTCTGAGTACGTGCGCTCGTCCGAGTGGACTATCATGAGCTGTGCTGGCGGCGCAG 540  
 DB 763443 GCGAGTCTGAGTACGTGCGCTCGTCCGAGTGGACTATCATGAGCTGTGCTGGCGGCGCAG 763502  
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGC 600  
 DB 763503 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGC 763562  
 QY 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTCGAGCAGGCGCGCTGG 660  
 DB 763563 TCATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTCGAGCAGGCGCGCTGG 763622  
 QY 661 TGGGCACCGGATGGAGTGGCGCGGCGATCGAGCGCGG 699  
 DB 763623 TGGGCACCGGATGGAGTGGCGCGGCGATCGAGCGCGG 763661

RESULT 3  
 US-09-103-840A-1  
 ; Sequence 1, Application US/09103840A  
 ; Patent No. 6294328  
 ; GENERAL INFORMATION:  
 ; APPLICANT: FLEISCHMAN, Robert D.  
 ; APPLICANT: WHITE, Owen R.  
 ; APPLICANT: FRASER, Claire M.  
 ; APPLICANT: VENTER, John C.  
 ; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
 ; TUBERCULOSIS

:	APPLICANT:	FLEISCHMAN, Robert D.			
:	APPLICANT:	WHITE, Owen R.			
:	APPLICANT:	FRASER, Claire M.			
:	APPLICANT:	VENTER, John C.			
:	TITLE OF INVENTION:	DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM			
:	TITLE OF INVENTION:	TUBERCULOSIS			
:	FILE REFERENCE:	24366-20007.00			
:	CURRENT APPLICATION NUMBER:	US/09/103,840A			
:	CURRENT FILING DATE:	1998-06-24			
:	NUMBER OF SEQ ID NOS:	2			
:	SOFTWARE:	PatentIn Ver. 2.1			
:	SEQ ID NO 1				
:	LENGTH:	4411529			
:	TYPE:	DNA			
:	ORGANISM:	Mycobacterium tuberculosis			
:	OTHER INFORMATION:	H3/RV			
US-09-103-840A-1					
Query Match                  85.0%;    Score 599;    DB 3;    Length 4411529;					
Best Local Similarity      90.4%;    Pred No. 1.8e-109;    Indels       0;    Gaps       0;					
Matches    632;    Conservative     6;    Mismatches    63;    Indels       0;    Gaps       0;					
QY	1	CCCAGGACGTGGAGCGCATCACACCGCAGACCCTGATCAACAATCCGTCRCGTGCGTGGCGG	60		
Db	761003	CCCAGGACGTGGAGCGCATCACACCGCAGACTTGATCAACATCCGCCGTGGTGC	60		
QY	61	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTGTCCAGTTCATGACACAGAACACCCCG	120		
Db	761063	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTGTGAGCCAATTTCATGGACCAACAACCCG	120		
QY	121	TGTCGGGTCTGACCCACAAGCGCCGCTGTGCGGCCTGGGCCCGGGTGGTCTGTCCCCGG	180		
Db	761123	TGTCGGGTCTGACCCACAAGCGCCGACTGTGCGGCTGGGGCCCGCGGTCTGTCACTG	180		
QY	181	AGCGGGCGGCTCGAGGTCCGTGACGTGACACCCGTCSACTACCGCCGATGTCCCGGA	240		
Db	761183	AGCGTCGGGCTCGAGGTCCGCGACGTGACCCGTGCACTACCGCCGGATGTCCCGGA	240		
QY	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCGTTGAYGCGCGG	300		
Db	761243	TCGAAACCCCTGAGGGGCCAACATCGGTCTGTATCGGCTCGCTGTCGGTGTACGCGCGG	300		
QY	301	TSAAACCCGTCGGTTCATCGAGACCCCGTACCGCAAGTGCTCGACGGTGTGTCACCG	360		
Db	761303	TCRAACCGGTCGGTTCATCGAAACGCGCTACCGCAAGTGCTCGACGCGTGTGTTAGG	360		
QY	361	ACGAGATCCACTACTCTACCGCCGACGAGGAGGACCGCCACGTSGTGCGCAGGCCAAT	420		
Db	761363	ACGAGATCGTGTACTCTACCGCCGACGAGGAGGACCGCCACGTSGTGTCACAGGCCAAT	420		
QY	421	CGCCGATCGACACAAGGGCCGGTTTCGAGGAGKCCCGGGTGTGGTCCGCGCSAAGGCGG	480		
Db	761423	CGCCGATCGATCGGACGGTTCGTTTCGTGAGACCGCGCGTGTGTCGCGCGAAGGCGG	480		
QY	481	GCGAGGTCGAGTAGTCCCTCGTCGAGGTGGACTACATGAGCGTGTGCGCGCGCCAGA	540		
Db	761483	GCGAGGTGGAGTAGTCCCTCGTCTGAGGTGGACTACATGAGCGTCTTCGCGCCGCCAGA	540		
QY	541	TGTTGTCGGTGGCCACCACCGATGATCCGTTCTCTGAGCAGCAGACGCCAACCGTGGCC	600		
Db	761543	TGTTGTCGGTGGCCACCACCGATGATTCCTTCCTGGAGCAGCAGACGCCAACCGTGGCC	600		
QY	601	TGATGGCGCCAAATGAAGCGCCAGCGGTTCCGCTGTGTCGAGCGAGGCGCGCGTGG	660		
Db	761603	TCATGGGGGCAAAATGACGCGCCAGCGGTGCCGCTGGTCCGTAGCGAGGCCCCCGCTGG	660		
QY	661	TGGSCACCGCATGGAGCTGCGCGCGCGATCGACGCGG	699		
Db	761663	TGGSCACCGGATGGAGCTGCGCGCGCGATTCGACGCGG	761701		

## RESULT 4

US-08-313-185-57

```

: Sequence 57, Application US/08313185
: Patent No. 5851763
: GENERAL INFORMATION:
: APPLICANT: Heym, Beate
: APPLICANT: Cole, Stewart
: APPLICANT: Young, Douglas
: APPLICANT: Zhang, Ying
: APPLICANT: Honore, Nadine
: APPLICANT: Teienti, Amalio
: APPLICANT: Bodmer, Thomas
: TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
: TITLE OF INVENTION: in Mycobacterium Tuberculosis
: NUMBER OF SEQUENCES: 66
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
: ADDRESSEE: Dunner
: STREET: 1300 I Street, N.W.
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20005-3315
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/313,185
: FILING DATE: 12-OCT-1994
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Meyers, Kenneth J.
: REGISTRATION NUMBER: 25,146
: REFERENCE/DOCKET NUMBER: 02356..0069-00000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (202) 408-4000
: TELEFAX: (202) 408-4400
: INFORMATION FOR SEQ ID NO: 57:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 3447 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: US-08-313-185-57

```

Query Match	80.0%;	Score 563.8;	DB 2;	Length 3447;
Best Local Similarity	87.3%;	Pred. No. 1e-102;		
Matches 610;	Conservative 6;	Mismatches 83;	Indels 0;	Gaps 0;
QY 1	CCGAGGACGTGGAGGCGATCACACCCGACGACCCCTGATCAACATCCGTCCRGTCGTGGCGG	60		
Db 1124	CCGAGGACGTGAGGCGGATCACCGCGACGCGTGATCAATATCCGTCGCGTGTGCGCG	1183		
QY 61	CGATCAAGGAGTCTTTCGGCACGACGACGCTGTCCCAAGTTTCATGGACCGAGAAACAACCCGC	120		
Db 1184	CTATCAAGGAATCTTTCGGCACGACGACGCTGTGCGAGTTCATGGATCAAGAACACCCCTC	1243		
QY 121	TGTGCGGTCGTAGACCAACAGCGCGCGCTGTGCGCGTGTGGCCCGCGGTGGTCTGTGCCGGG	180		
Db 1244	TGTGCGGCTGTACCCCAACAGCGCGCGTGTGCGCGCTGTGGCCCGCGGTGGTGTGCGGTG	1303		
QY 181	AGCGGCGCGCCTGTGAGGTCCTGTGACGTGCACCCGTCACACTACGCGCGGATGTGCCGA	240		
Db 1304	AGCGTCGCGGCTGTAGAGTCCGTGACGTGCACCCCTTCGCACTACGCGCGGATGTGCCGA	1363		
QY 241	TCGAGACCCCGGAGGCTCCAAATCGGTCGTGATCGGCTCGCTGTGCGTGTAVGCGCGGG	300		
Db 1364	TCGAGACTCCGAGGCGCCGAACATAGTCTGATCGGTTCAATTGTGCGTGTACGCGGGG	1423		
QY 301	TSAAACCGTTTCGGTTCATCGAGACCCCGTACCGCAAGGTGGTGTGACGGTGTGTCACCG	360		
Db 1424	TCAACCCCTTCGGTTCATCGAAACACCGTACCGCAAGTGTGTGACGTTGTCGTTGTCAGG	1483		

361	QY	ACGAGATCCACTACCTGACCGCGCAGGAGAGACCGCCACGTSGTGGCGCAGGCCAACT	420
1484	Db	ACGAGATCGAATACTTTCACCGCTGACGAGGAACCGCCATGTCGTGGCGCAGGCCAACT	1543
421	QY	CGCCGATCGACGACAGAGGCGGTTTCAGAGAGKCCGGGTGCTGTTCCGCCGSAAGCGG	480
1544	Db	CGCCGATCGACGAGGCGCGGTTCTTCGAGCGCGCGGTGTTGGTGCGCCGCAAGCGG	1603
481	QY	GCGAGGTCGAGTACGTGCGCCTCGTCCGAGGTGACATGACGAGTGTCTCGCCGCGCCAGA	540
1604	Db	GCGAGGTGAGTACGTGGCCTCGTCCGAGGTGATTTACATGGATGTTCTCGCCACGCCAGA	1663
541	QY	TGATGTCGGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGAGCGCCAAACCGTGCCC	600
1664	Db	TGATGTCGGTGGCCACGAGCGATGATTCGGTTCTTCGAGACGACGAGCGCCAAACCGTGCCC	1723
601	QY	TGATGGCGGCCAACATGACGCGCCAGSCGGTTCGCTGGTGGCGAGGAGGCGCGCGTGG	660
1724	Db	TGATGGCGGCTAACATGCACGCGCTCAGCGGTTCCGTTGGTGGCGAGGACGACCGTGG	1783
661	QY	TGGGCACCGGCATGAGAGCTCGCGCGCGCGATCGACGCGG	699
1784	Db	TGGGTACCGGTATGGAGTTTCGCGCGCGCCATTCGACGCTG	1822

## RESIST 5

```

US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis

```

[illegible]

RESULT 6

```

US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent NO. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; Resistance to Rifampin in Mycobacterial Cultures and in
; Tissue of Invention: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

```

ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/250,030  
FILING DATE: 26-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Muetting, Ann M.  
REGISTRATION NUMBER: 33,977  
REFERENCE/DOCKET NUMBER: 150.105US1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-250-030-1

Query Match 76.1%; Score 536.4; DB 1; Length 970;  
Best Local Similarity 90.0%; Pred. No. 2.3e-97;  
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 1 CCCAGGAGCTGAGGCGGATCAACCGCAGACCCCTGATCAACATCCGTCRCGTGCGGG 60
Db |||||
QY 341 CCCAGGAGCTGAGGCGGATCAACCGCAGACCCCTGATCAACATCCGTCRCGTGCGGG 400
Db |||||
QY 61 CGATCAAGAGTTCTTCGGCACCAGCCAGTGTCCAGTTCATGACCAACACCCGC 120
Db |||||
QY 401 CGATCAAGAGTTCTTCGGCACCAGCCAGTGTCCAGTTCATGACCAACACCCGC 460
Db |||||
QY 121 TGTCCGGTCTGACCCACAAGCGCCCGCTGTCCGCGCTCGGCGCTCGGCGCTGTGTCACG 180
Db |||||
QY 461 TGTCCGGTCTGACCCACAAGCGCCCGCTGTCCGCGCTCGGCGCTCGGCGCTGTGTCACG 520
Db |||||
QY 181 AGCGGCGCGGCTCGAGGTCGTCGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCT 240
Db |||||
QY 521 AGCGTGCAGGCTGAGGAGCGGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCT 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGGCTCGGCTCGGCTCGGCT 300
Db |||||
QY 581 TCGAACCCTGAGGCGGCGGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCTCGGCT 640
Db |||||
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACCGTGTGTCACCG 360
Db |||||
QY 421 CGCCGATCGATCGGAGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 480
Db |||||
QY 761 CGCCGATCGATCGGAGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 820
Db |||||
QY 481 GCGAGGTCGAGTACGTCGCTCGGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 540
Db |||||
QY 821 GCGAGGTCGAGTACGTCGCTCGGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 880
Db |||||
QY 541 TGGTGTCCGTGCGCACCAGGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAGTCC 600
Db |||||
QY 881 TGGTGTCCGTGCGCACCAGGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAGTCC 630
Db |||||
QY 601 TGATGGGCGCAACATGACGCGCCAGGCGG 630
Db |||||
QY 941 TCATGGGCGCAACATGACGCGCCAGGCGG 970
Db |||||
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RESULT 7  
PCT-US95-06790-1  
Sequence 1, Application PC/TUS9506790  
GENERAL INFORMATION:  
APPLICANT: Mayo Foundation for Medical Education and Research  
APPLICANT: and Hoffmann-La Roche Inc.  
TITLE OF INVENTION: Detection of a Genetic Locus Encoding  
TITLE OF INVENTION: Resistance to Rifampin  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Schwegman, Lundberg & Woessner  
STREET: 3500 IDS Center  
CITY: Minneapolis  
STATE: MN  
COUNTRY: USA  
ZIP: 55402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/06790  
FILING DATE: 26-MAY-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Raasch, Kevin W.  
REGISTRATION NUMBER: 35,651  
REFERENCE/DOCKET NUMBER: 150.105WO1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-339-0331  
TELEFAX: 612-339-3061  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 970 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
PCT-US95-06790-1

Query Match 76.1%; Score 536.4; DB 5; Length 970;  
Best Local Similarity 90.0%; Pred. No. 2.3e-97;  
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 1 CCCAGGAGCTGAGGCGGATCAACCGCAGACCCCTGATCAACATCCGTCRCGTGCGGG 60
Db |||||
QY 341 CCCAGGAGCTGAGGCGGATCAACCGCAGACCCCTGATCAACATCCGTCRCGTGCGGG 400
Db |||||
QY 61 CGATCAAGAGTTCTTCGGCACCAGCCAGTGTCCAGTTCATGACCAACACCCGC 120
Db |||||
QY 401 CGATCAAGAGTTCTTCGGCACCAGCCAGTGTCCAGTTCATGACCAACACCCGC 460
Db |||||
QY 121 TGTCCGGTCTGACCCACAAGCGCCCGCTGTCCGCGCTCGGCGCTCGGCGCTGTGTCACG 180
Db |||||
QY 461 TGTCCGGTCTGACCCACAAGCGCCCGCTGTCCGCGCTCGGCGCTCGGCGCTGTGTCACG 520
Db |||||
QY 181 AGCGGCGCGGCTCGAGGTCGTCGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCT 240
Db |||||
QY 521 AGCGTGCAGGCTGAGGAGCGGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCT 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGGCTCGGCTCGGCTCGGCT 300
Db |||||
QY 581 TCGAACCCTGAGGCGGCGGAGTCCGCTGTCGCGCTCGGCTCGGCTCGGCTCGGCTCGGCT 640
Db |||||
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCGACCGTGTGTCACCG 360
Db |||||
QY 421 CGCCGATCGATCGGAGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 700
Db |||||
QY 481 GCGAGGTCGAGTACGTCGCTCGGAGTCCGCTGTCGAGTCCGCTGTCGAGTCCGCTGTCGAG 420
Db |||||
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Db 701 ACAGATCGTGTAACCGCGGACGAGAGGACCGCCAGCTGGTGGCACAGCCCAATT 760  
Qy 421 CGCGATCGACGACAAAGGCGCGGTTGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480  
Db 761 CGCGATCGATCGGACGGTGGCTTCGTCGAGCGCGCGTGGTCCGCGCAAGCGG 820  
Qy 481 GCGAGGTGAGTACGTCCTCGTCGAGGTGGATACATGAGAGTGTGCGCGGCCAGA 540  
Db 821 GCGAGGTGAGTACGTCCTCGTCTGAGGTGGATACATGAGAGTGTGCGCGGCCAGA 880  
Qy 541 TGCTGCGGTGGCCACCGCGATGATCCGTTCTCGAGACGAGACGCAACCGTGGCC 600  
Db 881 TGCTGCGGTGGCCACCGCGATGATTCCTTCCTGGAGACGAGACGCAACCGTGGCC 940  
Qy 601 TGATGGCGCCAAACATGACGCGCCAGCGG 630  
Db 941 TCATGGGGCAACATGACGCGCCAGCGG 970

RESULT 8  
US-08-757-653-135  
; Sequence 135, Application US/08/575653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 135:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-135

Query Match 74.7%; Score 526.4; DB 2; Length 620;  
Best Local Similarity 89.8%; Pred. No. 2.1e-95;  
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCRGTGTCGGCGGATCAAGAGTTCTTCGGCACGAGCGAGCTGTCC 95  
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Qy 96 CAGTTTCATGGACCAAGAACCCGCTGTGGGTCTGACCCACAGCGCGCGCTGTGGCG 155  
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Qy 156 CTGGGCCCGGGTGGTCTGTCCTGGGAGCGGGCTGGAGGTCCTGAGCTGSCACCCG 215  
Db 121 CTGGGGCCCGCGGTCTGTACGTGAGCTGCGCGGGCTGGAGGTCCTGAGCTGSCACCCG 180  
Qy 216 TCSACTACCGCGCGGATGTCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275  
Db 181 TCGACTACCGCGCGGATGTCGGATCGAAACCCCTGAGGGGCCAACATCGGTCTGATC 240  
Qy 276 GGCTCGTGTGGGTGATGAGCGGGTSAACCCGTTGGGTTCATCGAGACCCCGTACCGC 335  
Db 241 GGCTCGTGTGGGTGATGAGCGGGTCAACCCGTTGGGTTCATCGAAACCCCGTACCGC 300  
Qy 336 AAGTGTGTCAGCGGTGTCACGAGAGATCACTACCTGACCGCGCGAGGAGGAC 395  
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Qy 396 CGCACGTGTGGCGCAGGCGCACTCGCCGATCGACGACAAAGGCGCGTTTCGAGGAGKCC 455  
Db 361 CGCACGTGTGGCGCAGGCGCAATTCGCCGATCGATGCGGACGCTGCTTCGTCGAGCGC 420  
Qy 456 CGGTGTGTCGCGCGSAAAGCGGCGAGGTGAGTACGTGCGCTGTCGAGGTTGAC 515  
Db 421 CGGTGTGTCGCGCGCAAGCGGCGAGGTGAGTACGTGCGCTGTCGAGGTTGAC 480  
Qy 516 TACATGACGTGTGCGCGCGCAGATGCTGTCGGTGGCCACCGGATGATCCCGTTCCTC 575  
Db 481 TACATGACGTGTGCGCGCGCAGATGCTGTCGGTGGCCACCGGATGATCCCGTTCCTG 540  
Qy 576 GAGCACGACGACGCAACCGTGCCTGATGGCGCCCAACATGACAGCGCCAGCGGTTCCG 635  
Db 541 GAGCACGACGACGCAACCGTGCCTCATGGGGCAAAACATGACAGCGCCAGGCGGTGCGC 600  
Qy 636 CTGTGCGCAGCGAGGCGCC 655  
Db 601 CTGTGCGTAGCGAGGCGCC 620

RESULT 9  
US-08-757-653-138/c  
; Sequence 138, Application US/08/575653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 138:  
; INFORMATION FOR SEQ ID NO: 138:



SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-757-653-138

Query Match 74.7%; Score 526.4; DB 2; Length 620;  
Best Local Similarity 89.8%; Pred. No. 2.1e-95;  
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCRCGTGCGGGGATCAAGAGTCTTTCGGACCAACAGCTGTCC 95
Db 620 ATCAACATCCGCGGTGTCGCGGATCAAGAGTCTTTCGGACCAACAGCTGTCC 561
QY 96 CAGTTTCATGACACAGAACCCCGCTGTCCGCTGTGACCCACAGCGCCGCTGTCCGG 155
Db 560 CAATTCATGACACAGAACCCCGCTGTCCGCTGTGACCCACAGCGCCGCTGTCCGG 501
QY 156 CTGGGCCCCGGTGTCTGTCCGGAGCGCGGCTGTGAGTCTCGTACGTCACGCCG 215
Db 500 CTGGGCCCCGGTGTCTGTCCGGAGCGCGGCTGTGAGTCTCGTACGTCACGCCG 441
QY 216 TCSACTACGCGCGATGTCCGATCGAGACCCCGAGGTCCTCAACATCGCTCTGATC 275
Db 440 TCGACTACGCGCGATGTCCGATCGAGAACCCCTGAGGGGCCCAACATCGCTCTGATC 381
QY 276 GGCTCGCTCTGCTGTGTGCGGGGTTAAACCCGTTTCGGGTTTCATCGAGACCCCGTACC 335
Db 380 GGCTCGCTCTGCTGTGTGCGGGGTTAAACCCGTTTCGGGTTTCATCGAGACCCCGTACC 321
QY 336 AAGTGTGTGAGTGTGTGTACCGAGATCTACTACTACCCCGAGAGGAGGAC 395
Db 320 AAGTGTGTGAGTGTGTGTACCGAGATCTACTACTACCCCGAGAGGAGGAC 261
QY 396 CGCCACGTGTGGCGAGCCAACTCGCGATCGAGCAAGGGCCGGTTCGAGAGKCC 455
Db 260 CGCCACGTGTGGCGAGCCAACTCGCGATCGAGCAAGGGCCGGTTCGAGAGKCC 201
QY 456 CGGCTGTGTGTGCGGAGCGGCGAGGTCTGAGTACGTCCTCGTCCGAGGTGGAC 515
Db 200 CGGCTGTGTGTGCGGAGCGGCGAGGTCTGAGTACGTCCTCGTCCGAGGTGGAC 141
QY 516 TACATGAGCTGTGCGCGGCGAGATGTGTGCGTGGCCACCGAGATGATGCTCTC 575
Db 140 TACATGAGCTGTGCGCGGCGAGATGTGTGCGTGGCCACCGAGATGATGCTCTC 81
QY 576 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCCAACATCGAGCGCGGTTCCG 635
Db 80 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCCAACATCGAGCGCGGTTCCG 21
QY 636 CTGTGCGCAGCGAGCGCC 655
Db 20 CTGTGCGCAGCGAGCGCC 1
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## RESULT 10

US-08-520-946-135  
Sequence 135, Application US/08520946  
Patent No. 6372424

## GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.  
APPLICANT: LYAMICHEV, VICTOR I.  
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
TITLE OF INVENTION: PATHOGENS  
NUMBER OF SEQUENCES: 160  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/520,946  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: CARROLL, PETER G.  
REGISTRATION NUMBER: 32,837  
REFERENCE/DOCKET NUMBER: FORS-01756  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 135:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 620 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-520-946-135

Query Match 74.7%; Score 526.4; DB 4; Length 620;  
Best Local Similarity 89.8%; Pred. No. 2.1e-95;  
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCRCGTGTCGCGGATCAAGAGTCTTTCGGACCAACAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTCGCGGATCAAGAGTCTTTCGGACCAACAGCTGTCC 60
QY 96 CAGTTTCATGACACAGAACCCCGCTGTCCGCTGTGACCCACAGCGCCGCTGTCCGG 155
Db 61 CAATTCATGACACAGAACCCCGCTGTCCGCTGTGACCCACAGCGCCGCTGTCCGG 120
QY 156 CTGGGCCCCGGTGTCTGTCCGGAGCGCGGCTCGAGTCTCGTACGTCACCGG 215
Db 121 CTGGGCCCCGGTGTCTGTACGTGAGCTGTCGCGGCTCGAGTCTCGGACCGG 180
QY 216 TCSACTACGCGCGATGTGCGCGATCGAGACCCCGAGGTCCTCAACATCGCTCTGATC 275
Db 181 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGCTCTGATC 240
QY 276 GGCTCGCTCTGCTGTGTGCGGCGGTSAAACCCGTTTCGGGTTTCATCGAGACCCCGTACC 335
Db 241 GGCTCGCTCTGCTGTGTGCGGCGGTSAAACCCGTTTCGGGTTTCATCGAAACCCCGTACC 300
QY 336 AAGTGTGTGCGAGGTGTGTCTACCGACGATCTACTACTACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTGCGAGGTGTGTGTAGCGACGAGATCTGTACTACCGCGCGAGGAGGAC 360
QY 396 CGCCACGTGTGGCGCAGGCCAACTCGCGGATCGAGCAAGGGCCGGTTCGAGGAGKCC 455
Db 361 CGCCACGTGTGGCGCAGGCCAACTTCGCGGATCGAGCGCGGCTTCGTCCGAGCGG 420
QY 456 CGGCTGTGTGTCGCGCGGAGAGGTCGAGTACGTCGCTCGTCCGAGGTGGAC 515
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QY 516 TACATGAGCTGTGCGCGCGCAGATGTGTGCGTGGCCACCGGATCATCCGTTCTC 575
Db 481 TACATGAGCTGTGCGCGCGCAGATGTGTGCGTGGCCACCGGATCATCCGTTCTC 540
QY 576 GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGCCCAACATCGAGCGCGGTTCCG 635
Db 541 GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGCCCAACATCGAGCGCGGTTCCG 600
QY 636 CTGTGCGCAGCGAGCGCC 655
Db 636 CTGTGCGCAGCGAGCGCC 655
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 4.4e-95;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCGRGTCTGCGGCGGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60

Qy 96 CAGTTTCATGACCAAGAACAAACCCGCTGCGGTCGTGACCCACAAAGCGCGGCTGTGCGG 155
Db 61 CAATTTCATGACCAAGAACAAACCCGCTGCGGTTGACCTACAAAGCGCGGCTGTGCGG 120

Qy 156 CTGGGCGCGGTGTGTCTCCGGGAGCGGCGGCTGAGGTCGTGAGCGTGACCCG 215
Db 121 CTGGGCGCGGCTGTGTCTCCGGGAGCGGCGGCTGAGGTCGTGAGCGTGACCCG 180

Qy 216 TCSACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGCTGTGTAYGCGGCGGTSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGC 335

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 4.4e-95;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCGRGTCTGCGGCGGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60

Qy 96 CAGTTTCATGACCAAGAACAAACCCGCTGCGGTCGTGACCCACAAAGCGCGGCTGTGCGG 155
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Qy 216 TCSACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
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Qy 276 GGCTCGCTGCTGTGTAYGCGGCGGTSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGC 335
Db 241 GGCTCGCTGCTGTGTAYGCGGCGGTSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGC 300

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Qy 396 CGGCACGTCGTGCGGCGGACCACTCCGCCGATCGACCAAGGGCGGTTTCGAGGAGKCC 455
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Db 421 CGGTGCTGTGTCGCGGAGGCGGCGGAGTCAGTACGTGCGCTCGTCCGAGGTGAC 480

Qy 516 TACATGACGTCGTGCGGCGGACGATGTCGTGTCGTCGTCACCGGATGATCCCGTTCTCTC 575
Db 481 TACATGACGTCGTGCGGCGGACGATGTCGTGTCGTCGTCGTCACCGGATGATTCCTCTCTG 540

Qy 576 GAGCACGACGACCAACCGTGTCCCTGATGGGCCCAACATGACAGCGCGGCGGTTCGCG 635
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Db      361  CGCCACGTSGTGGCGACAGGCCAAATTGCCCATCGATGCGGACCGTTCGTCGAGCCG 420
QY      456  CGGGTCTGTGTCGCGCGSAAAGCGGCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db      421  CGCGTGTGTGTCGCGCGCAAGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY      516  TACATGAGGTGTGCGCGCGCAGATGTTGTGCGTGGCCACCGCGATGATCCCGTTCTTC 575
Db      481  TACATGAGGTGTGCGCGCGCAGATGTTGTGCGTGGCCACCGCGATGATCCCGTTCTTC 540
QY      576  GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCAAACATGACGCGCCGAGCGGTTCCG 635
Db      541  GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAACATGACGCGCCGAGCGGTTCCG 600
QY      636  CTGGTCGCGCAGGAGCGCC 655
Db      601  CTGGTCGTCGAGGAGCCCC 620

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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Title: US-09-285-306-10

Perfect score: 705

Sequence: 1 ccaggagctggaggcgtac.....ggcgatcgagcgaggacgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

#### Database :

Published Applications NA:\*

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- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
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- 18: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq:\*
- 19: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	702.2	99.6	705	9	US-09-285-306-10
2	691	98.0	705	9	US-09-285-306-4
3	691	98.0	705	9	US-09-285-306-5
4	691	98.0	705	9	US-09-285-306-6
5	691	98.0	705	9	US-09-285-306-7
6	691	98.0	705	9	US-09-285-306-8
7	691	98.0	705	9	US-09-285-306-9
8	691	98.0	705	9	US-09-285-306-12
9	691	98.0	705	9	US-09-285-306-13
10	691	98.0	705	9	US-09-285-306-14
11	691	98.0	705	9	US-09-285-306-16
12	691	98.0	705	9	US-09-285-306-24
13	691	98.0	705	9	US-09-285-306-17
14	691	98.0	705	9	US-09-285-306-3

15	683	96.9	705	9	US-09-285-306-11	Sequence 11, Appl
16	677	96.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	675	95.7	705	9	US-09-285-306-87	Sequence 87, Appl
18	675	95.7	705	9	US-09-285-306-88	Sequence 88, Appl
19	675	95.7	705	9	US-09-285-306-90	Sequence 90, Appl
20	675	95.7	705	9	US-09-285-306-92	Sequence 92, Appl
21	675	95.7	705	9	US-09-285-306-96	Sequence 96, Appl
22	673.4	95.5	705	9	US-09-285-306-84	Sequence 84, Appl
23	673.4	95.5	705	9	US-09-285-306-86	Sequence 86, Appl
24	673.4	95.5	705	9	US-09-285-306-93	Sequence 93, Appl
25	673.4	95.5	705	9	US-09-285-306-94	Sequence 94, Appl
26	673.4	95.5	705	9	US-09-285-306-95	Sequence 95, Appl
27	673	95.5	687	9	US-09-285-306-18	Sequence 18, Appl
28	673	95.5	687	9	US-09-285-306-19	Sequence 19, Appl
29	673	95.5	687	9	US-09-285-306-20	Sequence 20, Appl
30	673	95.5	687	9	US-09-285-306-21	Sequence 21, Appl
31	673	95.5	687	9	US-09-285-306-22	Sequence 22, Appl
32	673	95.5	687	9	US-09-285-306-23	Sequence 23, Appl
33	673	95.5	687	9	US-09-285-306-25	Sequence 25, Appl
34	673	95.5	687	9	US-09-285-306-27	Sequence 27, Appl
35	671.8	95.3	705	9	US-09-285-306-85	Sequence 85, Appl
36	671.8	95.3	705	9	US-09-285-306-89	Sequence 89, Appl
37	671.8	95.3	705	9	US-09-285-306-91	Sequence 91, Appl
38	668.6	94.8	705	9	US-09-285-306-143	Sequence 143, App
39	667	94.6	705	9	US-09-285-306-144	Sequence 144, App
40	657	93.2	687	9	US-09-285-306-100	Sequence 100, App
41	655.8	93.0	705	9	US-09-285-306-181	Sequence 181, App
42	655.4	93.0	687	9	US-09-285-306-99	Sequence 99, Appl
43	653.8	92.7	687	9	US-09-285-306-98	Sequence 98, Appl
44	652.2	92.5	687	9	US-09-285-306-97	Sequence 97, Appl
45	650.6	92.3	687	9	US-09-285-306-146	Sequence 146, App

#### ALIGNMENTS

RESULT 1  
US-09-285-306-10  
; Sequence 10, Application US/09285306A  
; Publication NO. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gengras, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 10  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium avium  
; US-09-285-306-10

Query Match	99.6%	Score 702.2	DB 9	Length 705
Best Local Similarity	100.0%	Pred. No. 1.1e-154	Indels 0	Gaps 0
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Db	1	CCAGGAGCTGGAGCGGATCAACCGGAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60		
QY	61	CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTATGACACAGAACACCCGC 120		
Db	61	CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTATGACACAGAACACCCGC 120		
QY	121	TGTCGGGTCTGACCCACAAGCCGCCCTGTGGGCTGGGCTGGGCTGGGCTGGTCTGTCCCGG 180		
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QY 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCCGCTCSCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCCGCTCSCACTACGCGCGGATGTGCCCGA 240
QY 241 TCAGAGCCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGGG 300
Db 241 TCAGAGCCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGGG 300
QY 301 TSAACCCGTTCCGTTTCATCGAGACCCCTACCGAAGGTGGTTCGACGGTGTGTTCAACCG 360
Db 301 TSAACCCGTTCCGTTTCATCGAGACCCCTACCGAAGGTGGTTCGACGGTGTGTTCAACCG 360
QY 361 ACAGATCCACTACTCTACCGCCGACGAGGAGGACCCGCCACGTSGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTACCGCCGACGAGGAGGACCCGCCACGTSGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTCTGGTCCGCGSAAAGCGG 480
Db 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTCTGGTCCGCGSAAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGCCAACCGTGCCC 600
QY 601 TGATGGGCGCAACATCGACGCGGAGGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCAACATCGACGCGGAGGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
QY 661 TGGGCACCGCATCGAGCTGCGCGCGCATCGACGCGCGACGT 705
Db 661 TGGGCACCGCATCGAGCTGCGCGCGCATCGACGCGCGACGT 705
```

## RESULT 2

```
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4
```

```
Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGAGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCRCGTCTGTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTTCGGACACCGACGAGTGTCCAGTTTCATGACACGACACCCGC 120
Db 61 CGATCAAGAGGTTCTTTCGGACACCGACGAGTGTCCAGTTTCATGACACGACACCCGC 120
QY 121 TGTCCGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGCGGTTGTTCTGCCCGG 180
```

```
Db 121 TGTCCGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGCGGTTGTTCTGCCCGG 180
QY 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCCGCTCSCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCCGCTCSCACTACGCGCGGATGTGCCCGA 240
QY 241 TCAGAGCCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGGG 300
Db 241 TCAGAGCCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGGG 300
QY 301 TSAACCCGTTCCGTTTCATCGAGACCCCTACCGAAGGTGGTTCGACGGTGTGTTCAACCG 360
Db 301 TSAACCCGTTCCGTTTCATCGAGACCCCTACCGAAGGTGGTTCGACGGTGTGTTCAACCG 360
QY 361 ACAGATCCACTACTCTACCGCCGACGAGGAGGACCCGCCACGTSGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTACCGCCGACGAGGAGGACCCGCCACGTSGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTCTGGTCCGCGSAAAGCGG 480
Db 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTCTGGTCCGCGSAAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGCCAACCGTGCCC 600
QY 601 TGATGGGCGCAACATCGACGCGGAGGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCAACATCGACGCGGAGGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
QY 661 TGGGCACCGCATCGAGCTGCGCGCGCATCGACGCGCGACGT 705
Db 661 TGGGCACCGCATCGAGCTGCGCGCGCATCGACGCGCGACGT 705
```

## RESULT 3

```
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

```
Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGAGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCRCGTCTGTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTTCGGACACCGACGAGTGTCCAGTTTCATGACACGACACCCGC 120
Db 61 CGATCAAGAGGTTCTTTCGGACACCGACGAGTGTCCAGTTTCATGACACGACACCCGC 120
```



Qy	121	TGTCGGGTCTGACCAACAAGCGCCGCCCTGTGCGCGCTGGGCCCGGTTGGTGTGTCCCCGGG	180
Db	121	TGTCGGGGCTCACCACAAGCGCCGCCCTGTGCGCGCTGGGCCCGGTTGGTGTGTCCCCGGG	180
Qy	181	AGCGGCGGGCTGGAGGTCCGTGACGTGCACCCGTCSACTACGGCCGGATGTGCCGA	240
Db	181	AGCGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGGCCGGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCCACAATPCGCTCTGATCGGCTCGCTGTCGGTGTAAGCGCGGG	300
Db	241	TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCGGTGTAAGCGCGGG	300
Qy	301	TSAAACCGTTCCGGTTTCATCAGACAGCCCGTAGCCGCAAGGTGGTGCACGGTGTGFTCACCG	360
Db	301	TCAAACCGTTCCGGTTTCATCAGACAGCCCGTAGCCGCAAGGTGGTGCACGGTGTGFTCACCG	360
Qy	361	ACGAGATCCACTACTCTGACCCGACGAGGAGGACCGCCACGTGTGGCGCAGGCGCAACT	420
Db	361	ACGAGATCCACTACTGACCCGACGAGGAGGACCGCCACGTGTGGCGCAGGCGCAACT	420
Qy	421	CGCCGATCGACGAAAGGGCCGGTTCGAGGAKKCCCGGTTGTTGGTCCGCCSAGSGGG	480
Db	421	CGCCGATCGACGAAAGGGCCGGTTCGCGGAGGCGCCGGTCTGTTCCGCCGCAAGSGGG	480
Qy	481	GCGAGGTCGAGTAGTGCCTCTGTCGAGGAKKCCCGGTTGTTGGTCCGCCGCGCCAGA	540
Db	481	GCGAGGTCGAGTAGTGCCTCTGTCGAGGAGGAGCCGCTACATGACGTGTGCGCGCGCCAGA	540
Qy	541	TGTTGTTCGGTGGCCACCGCATGATCCCGTTCCCTCGACGACGACGCCAACCGTGCC	600
Db	541	TGTTGTTCGGTGGCCACCGCATGATCCCGTTCCCTCGACGACGACGCCAACCGTGCC	600
Qy	601	TGATGGGCGCAACATGACAGCGCCAGGCGGTTCCGCTGGTGGCAGGAGGCGCGCTGG	660
Db	601	TGATGGGCGCAACATGACAGCGCCAGGCGGTTCCGCTGGTGGCAGGAGGCGCGCTGG	660
Qy	661	TGGSCACCGCATGAGTGTGCGCGGCGATCGACGCGCGGCGCACT	705
Db	661	TGGSCACCGCATGAGTGTGCGCGGCGATCGACGCGGCGCACT	705
RESULT 4			
US-09-285-306-6			
; Sequence 6, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: GINGERAS, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 01-8547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285,306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080,616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 6			
; LENGTH: 705			
; TYPE: DNA			
; ORGANISM: Mycobacterium avium			
US-09-285-306-6			

Db	61	CGATCAGGAGTTCTTCGGCACCAAGCCAGCTGTCCAGTTTCATGCACAGAAACAACCCGC	120
Qy	121	TGTCGGGTCTGACCAACAAGCCGCCTGTCCGCGCTGGGCCCGGGTGGTCTGTCTCCCGG	180
Db	121		
Db	121	TGTCCGGGCTCACCAACAAGCCGCCTGTTCGGCGCTGGGCCCGGGTGGTCTGTCTCCCGG	180
Qy	181	AGCCGGCCGGCTCGAGGTTCGCTGACGTGCACCCCGTCSACTACCGCCGATGTGCCGA	240
Db	181	AGCCGGCCGGCTGGAGTTCGCGACGTGCACCCGTCCACTACCGCCGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCCAACATTCGCTCTGATCGGCTCGCTGTCTGATGCGCGGG	300
Db	241	TCGAGACCCCGAGGGTCCCAACATTCGCTCTGATCGGCTCGCTGTCTGATGCGCGGG	300
Qy	301	TSAAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGGTTCGACGGTGTGTCACCG	360
Db	301	TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGGTTCGACGGTGGTTCACCG	360
Qy	361	ACGAGATCCACTACTCTACGCCCCACGAGGAGGACCGCCACTGTGTGGCGCAGGCCAACT	420
Db	361	ACGAGATCCACTACTCTACGCCCCACGAGGAGGACCGCCACTGTGTGGCGCAGGCCAACT	420
Qy	421	CGCCGATCGACGACAAGGGCCGGTTTCGAGGAGKCCCGGGTGTGTTCGCCGCSAAGGGG	480
Db	421	CGCCGATCGACGACAAGGGCCGGTTTCGCCGAGGCCCGGGTGTGTTCGCCGCSAAGGGG	480
Qy	481	CGCAGGTCGAGTAGTGTCCTTCGCGAGGTGGAATAATGACGTGTGCGCGCGCCAGA	540
Db	481	CGCAGGTCGAGTAGTGTCCTTCGCGAGGTGGAATAATGACGTGTGCGCGCGCCAGA	540
Qy	541	TGGTGTCCGTTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCTGCC	600
Db	541	TGGTGTCCGTTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCTGCC	600
Qy	601	TGATGGCGGCCAACATCAGCGCCAGCGGTTCCGCTGGTCCGAGCAGCGCCGCTGG	660
Db	601	TGATGGCGGCCAACATCAGCGCCAGCGGTTCCGCTGGTCCGAGCAGCGCCGCTGG	660
Qy	661	TGGSCACCGCATGGAGCTGCGCGCGCGATTCGACGCGCGACGT	705
Db	661	TGGSCACCGCATGGAGCTGCGCGCGCGATTCGACGCGCGACGT	705
RESULT 5			
US-09-285-306-7			
; Sequence 7, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285,306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080,616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: Fast-SEQ for Windows Version 3.0			
; SEQ ID NO 7			
; LENGTH: 705			
; TYPE: DNA			
; ORGANISM: Mycobacterium avium			
US-09-285-306-7			

	Matches	691; Conservative	7; Mismatches	7; Indels	0; Gaps
Qy	1	CCGAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCRCGTCTGTGGCGG	60		
Db	1	CCGAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCRCGTCTGTGGCGG	60		
Qy	61	CGATCAAGGAGTCTTTCGGCACCCAGCAGCTGTCCCGAGTTTCATGGACCAAGAACACCGCG	120		

Query Match	98.0%	Score 691;	DB 9;	Length 705;
Best Local Similarity	98.0%;	Pred. No. 4.6e-152;		
Matches 691;	Conservative	7;	Mismatches 0;	Gaps 0;
QY	1	CCGAGGACGTGGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCCTCGTCGCGG	60	
Db	1	CCGAGACGTGGAGGCGGATCACACCCAGACCTGATCAACATCCGTCCTCGTCGCGG	60	

QY 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACCAAGAAACAACCCGC 120  
 Db 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACCAAGAAACAACCCGC 120  
 QY 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180  
 Db 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180  
 QY 181 AGCGGCGCGCTGTGAGGTCCGTGACGTGCACCCGCTCSACTACGGCCGGATGTGCCGA 240  
 Db 181 AGCGGCGCGCTGTGAGGTCCGTGACGTGCACCCGCTCSACTACGGCCGGATGTGCCGA 240  
 QY 241 TCAGACCCCGAGGGTCCCAACATCGTTCGTATCGGCTCGCTGTTCGGTGTATGCGCGGG 300  
 Db 241 TCAGACCCCGAGGGTCCCAACATCGTTCGTATCGGCTCGCTGTTCGGTGTATGCGCGGG 300  
 QY 301 TSAACCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360  
 Db 301 TSAACCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360  
 QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT 420  
 Db 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT 420  
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGGTGTGTCCCGCGSAAAGCGG 480  
 Db 421 CGCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGGTGTGTCCCGCGSAAAGCGG 480  
 QY 481 GCAGGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540  
 Db 481 GCAGGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540  
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600  
 Db 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600  
 QY 601 TGATGGCGCCCAACATCGAGCGCCGCGTTCGGTGTGGCAGCAGCGCGCGCTGG 660  
 Db 601 TGATGGCGCCCAACATCGAGCGCCGCGTTCGGTGTGGCAGCAGCGCGCGCTGG 660  
 QY 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGGACGT 705  
 Db 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGGACGT 705

RESULT 6  
 US-09-285-306-8  
 ; Sequence 8, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-8

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;  
 QY 1 CCCAGAGCTGGAGGCGATCACACCGACACCTGTATCAACATCCGTCCGTGGCGG 60

Db 1 CCCAGAGCTGGAGGCGATCACACCGACACCTGTATCAACATCCGTCCGTGGCGG 60  
 QY 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACCAAGAAACAACCCGC 120  
 Db 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTTCATGACCAAGAAACAACCCGC 120  
 QY 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180  
 Db 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180  
 QY 181 AGCGGCGCGCTGTGAGGTCCGTGACGTGCACCCGCTCSACTACGGCCGGATGTGCCGA 240  
 Db 181 AGCGGCGCGCTGTGAGGTCCGTGACGTGCACCCGCTCSACTACGGCCGGATGTGCCGA 240  
 QY 241 TCAGACCCCGAGGGTCCCAACATCGTTCGTATCGGCTCGCTGTTCGGTGTATGCGCGGG 300  
 Db 241 TCAGACCCCGAGGGTCCCAACATCGTTCGTATCGGCTCGCTGTTCGGTGTATGCGCGGG 300  
 QY 301 TSAACCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360  
 Db 301 TSAACCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360  
 QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT 420  
 Db 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT 420  
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGGTGTGTCCCGCGSAAAGCGG 480  
 Db 421 CGCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGGTGTGTCCCGCGSAAAGCGG 480  
 QY 481 GCAGGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540  
 Db 481 GCAGGTTCGAGTACGTGCCCTCGTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540  
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600  
 Db 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600  
 QY 601 TGATGGCGCCCAACATCGAGCGCCGCGTTCGGTGTGGCAGCAGCGCGCGCTGG 660  
 Db 601 TGATGGCGCCCAACATCGAGCGCCGCGTTCGGTGTGGCAGCAGCGCGCGCTGG 660  
 QY 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGGACGT 705  
 Db 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGGACGT 705

RESULT 7  
 US-09-285-306-9  
 ; Sequence 9, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; EARLIER FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 9  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 US-09-285-306-9

Query Match 98.0%; Score 691; DB 9; Length 705;  
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;  
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

```

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCGCTGATCAACATCCGTCBGTGCTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCGCTGATCAACATCCGTCBGTGCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTTCGGCGTGTGGCGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGTCTGACCAACAGCCCGCTGTTCGGCGTGTGGCGCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCGACCGCTCSACCTGTCGCTGCTGTATGCGCGGG 240
Db 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCGACCGCTCSACCTGTCGCTGCTGTATGCGCGGG 240
QY 241 TCAGACCCCGGAGGTCCCAACATCGGTCGCTGCTGTATGCGCGGG 300
Db 241 TCAGACCCCGGAGGTCCCAACATCGGTCGCTGCTGTATGCGCGGG 300
QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
Db 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTSCTGTCGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTSCTGTCGCGGCGGCAACT 420
QY 421 CGCCGATCGACCAAGGCGCGTTTCGCGAGGCGCGGTCGTCGCGGCGGCAACT 480
Db 421 CGCCGATCGACCAAGGCGCGTTTCGCGAGGCGCGGTCGTCGCGGCGGCAACT 480
QY 481 GCGAGTTCAGTACGTCCTGTCGAGGTGACCTACATGACAGTGTGCGCGCGCAGA 540
Db 481 GCGAGTTCAGTACGTCCTGTCGAGGTGACCTACATGACAGTGTGCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCCGCTGCC 600
Db 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCCGCTGCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGCTGCGCGCGGCGATGACGCGCGGACGT 705
Db 661 TGGGCAACCGGATGAGCTGCGCGCGGCGATGACGCGCGGACGT 705

```

RESULT 8

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US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium

```

Query Match 98.0%; Score 691; DB 9; Length 705;

```

Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCGCTGATCAACATCCGTCBGTGCTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCGCTGATCAACATCCGTCBGTGCTGGCGG 60
QY 61 CGATCAAGGAGTTCTTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTTCGGCGTGTGGCGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGTCTGACCAACAGCCCGCTGTTCGGCGTGTGGCGCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCGACCGCTCSACCTGTCGCTGCTGTATGCGCGGG 240
Db 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCGACCGCTCSACCTGTCGCTGCTGTATGCGCGGG 240
QY 241 TCAGACCCCGGAGGTCCCAACATCGGTCGCTGCTGTATGCGCGGG 300
Db 241 TCAGACCCCGGAGGTCCCAACATCGGTCGCTGCTGTATGCGCGGG 300
QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
Db 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
QY 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTSCTGTCGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTSCTGTCGCGGCGGCAACT 420
QY 421 CGCCGATCGACCAAGGCGCGTTTCGCGAGGCGCGGTCGTCGCGGCGGCAACT 480
Db 421 CGCCGATCGACCAAGGCGCGTTTCGCGAGGCGCGGTCGTCGCGGCGGCAACT 480
QY 481 GCGAGTTCAGTACGTCCTGTCGAGGTGACCTACATGACAGTGTGCGCGCGCAGA 540
Db 481 GCGAGTTCAGTACGTCCTGTCGAGGTGACCTACATGACAGTGTGCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCCGCTGCC 600
Db 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCCGCTGCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGAGCTGCGCGCGGCGATGACGCGCGGACGT 705
Db 661 TGGGCAACCGGATGAGCTGCGCGCGGCGATGACGCGCGGACGT 705

```

RESULT 9

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US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium

```

US-09-285-306-13

Query Match	98.0%;	Score 691;	DB 9;	Length 705;
Best Local Similarity	98.0%;	Pred. No. 4.6e-152;		
Matches 691;	Conservative 7;	Mismatches 7;	Indels 0;	Gaps 0;
QY	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCRCGTCTGTGGCGG	60	
DB	1	CCGAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG	60	
QY	61	CGATCAAGGAGTTCCTTCGGCACACGACGAGCTGTCCAGTTCACGATCCAGAACACCGC	120	
DB	61	CGATCAAGGAGTTCCTTCGGCACACGACGAGCTGTCCAGTTCATGGACGAGAACACCGC	120	
QY	121	TGTCGGGTCTGACCCCAAGCGCCCTGTTCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG	180	
DB	121	TGTCGGGGCTCACCCCAAGCGCCCGCTGTTCGGCGCTGGGCCCGGGTGGTCTGTCCCGGG	180	
QY	181	AGCGGGCGGGCTGAGAGTTCGCTGACGTGCACCGCTGSCACTACGGCCGGATGTGCCGA	240	
DB	181	AGCGGGCGGGCTGAGAGTTCGCGACGTGCACCGCTCCCACTACGGCCGGATGTGCCGA	240	
QY	241	TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTGCGTGTATGCGCGGG	300	
DB	241	TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTGCGTGTATGCGCGGG	300	
QY	301	TSAAACCGTTCGGGTTCATCGAGACCCGCTACCGAGGTGGTCGACGGTGTGTCACCG	360	
DB	301	TCAAACCGTTCGGGTTCATCGAGACCGCTACCGAGGTGGTCGACGGTGTGTCACCG	360	
QY	361	ACGAGATCCACTACTGACGCCGACGAGGAGGACCGCCACGTGTCGCGCAGGCGCAACT	420	
DB	361	ACGAGATCCACTACTGACGCCGACGAGGAGGACCGCCACGTGTCGCGCAGGCGCAACT	420	
QY	421	CGCCGATCGACACAAGGGCCGGTTCGAGGAGKCCCGGGTGTGTCGCCCGCSAAGCGG	480	
DB	421	CGCCGATCGACACAAGGGCCGGTTCGCGGAGGCCCGGGTGTGTCGCCCGCSAAGCGG	480	
QY	481	CGGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540	
DB	481	CGGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540	
QY	541	TGTTGTTCGGTGGCCACCGGATGATCCCGTTCCTTCGACGACGACGCCACCGTGC	600	
DB	541	TGTTGTTCGGTGGCCACCGGATGATCCCGTTCCTTCGACGACGACGCCACCGTGC	600	
QY	601	TGATGGGCGCAACATGCAGCGCCAGGCGGTTCGCCCTGTGTCGCGACGAGGCGCGCTGG	660	
DB	601	TGATGGGCGCAACATGCAGCGCCAGGCGGTTCGCCCTGTGTCGCGACGAGGCGCGCTGG	660	
QY	661	TGGGCACCGCATGAGCTGCGCGCGGCGATCGACCGCGCGACGT	705	
DB	661	TGGGCACCGCATGAGCTGCGCGCGGCGATCGACCGCGCGACGT	705	

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; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4,6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTTCRGTGCGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTTCRGTGCGCGG 60

QY 61 CGATCAAGAGTCTTCGGCAACAGCCAGCTGTCCAGTTCATGGACCAAGCAACCCGC 120
Db 61 CGATCAAGAGTCTTCGGCAACAGCCAGCTGTCCAGTTCATGGACCAAGCAACCCGC 120

QY 121 TGTGGGCTGTGACCCCAAGCCGCGCTGTCCGCGCTGGGCGCGGTGCTGTGCCGG 180
Db 121 TGTGGGCTGTGACCCCAAGCCGCGCTGTCCGCGCTGGGCGCGGTGCTGTGCCGG 180

QY 181 AGCGGCGCGCTGTGAGTCCGAGTCCAGTCCACCGTCCCACTAGGCGGATGTGCCGA 240
Db 181 AGCGGCGCGCTGTGAGTCCGAGTCCAGTCCACCGTCCCACTAGGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300

QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360
Db 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360

QY 361 ACGAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTGCGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTGCGCGAGGCCAACT 420

QY 421 CGCCGATCGACACAAAGGCGCGGTTCGAGGAGCCCGGTGCTGTCGCGCAAGGCGG 480
Db 421 CGCCGATCGACACAAAGGCGCGGTTCGAGGAGCCCGGTGCTGTCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGAGTGGACTACATGAGACGTGTGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGAGTGGACTACATGAGACGTGTGCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600

QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCGCTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCGCTGTGCGCAGGAGGCGCGCTGG 660

QY 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

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RESULT 12
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

```

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RESULT 13
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4,6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTTCRGTGCGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTTCRGTGCGCGG 60

QY 61 CGATCAAGAGTCTTCGGCAACAGCCAGCTGTCCAGTTCATGGACCAAGCAACCCGC 120
Db 61 CGATCAAGAGTCTTCGGCAACAGCCAGCTGTCCAGTTCATGGACCAAGCAACCCGC 120

QY 121 TGTGGGCTGTGACCCCAAGCCGCGCTGTCCGCGCTGGGCGCGGTGCTGTGCCGG 180
Db 121 TGTGGGCTGTGACCCCAAGCCGCGCTGTCCGCGCTGGGCGCGGTGCTGTGCCGG 180

QY 181 AGCGGCGCGCTGTGAGTCCGAGTCCAGTCCACCGTCCCACTAGGCGGATGTGCCGA 240
Db 181 AGCGGCGCGCTGTGAGTCCGAGTCCAGTCCACCGTCCCACTAGGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGG 300

QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360
Db 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360

QY 361 ACGAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTGCGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGGAGGACCGCCACGTGTGCGCGAGGCCAACT 420

QY 421 CGCCGATCGACACAAAGGCGCGGTTCGAGGAGCCCGGTGCTGTCGCGCAAGGCGG 480
Db 421 CGCCGATCGACACAAAGGCGCGGTTCGAGGAGCCCGGTGCTGTCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGAGTGGACTACATGAGACGTGTGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGAGTGGACTACATGAGACGTGTGCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600

QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCGCTGTGCGCAGGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCGCTGTGCGCAGGAGGCGCGCTGG 660

QY 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

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; CURRENT FILING DATE: 1998-04-02
; EARLIER FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      97.8%; Score 689.4; DB 9; Length 705;
Best Local Similarity 97.9%; Pred. No. 1.1e-151;
Matches 690; Conservative 7; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCORGTGTCGGCG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCORGTGTCGGCG 60
Qy 61 CGATCAAGGAGTTCCTCGGCACCAAGCGAGCTGTCCCAAGTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCCTCGGCACCAAGCGAGCTGTCCCAAGTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGGGTCTGACCAACAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCG 180
Db 121 TGTGGGTCTGACCAACAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCG 180
Qy 181 AGCGGCGCGCTGGAGGTCGTGACGTGCACCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
Db 181 AGCGGCGCGCTGGAGGTCGTGACGTGCACCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
Qy 241 TCAGAGACCCGAGGTCCTCAACATCGGTGTGATCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
Db 241 TCAGAGACCCGAGGTCCTCAACATCGGTGTGATCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
Qy 301 TSAACCCGTTTCGGGTTTCATCGAGACCCGTTACCGCAAGGTCGTGCTGCTGCTGCTGCTGCTGCT 360
Db 301 TSAACCCGTTTCGGGTTTCATCGAGACCCGTTACCGCAAGGTCGTGCTGCTGCTGCTGCTGCTGCT 360
Qy 361 ACAGATCCACTACTCTGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 420
Db 361 ACAGATCCACTACTCTGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 420
Qy 421 CGCGATCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Db 421 CGCGATCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Qy 481 GCAGGTTCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540
Db 481 GCAGGTTCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540
Qy 541 TGGTGTGGTGGCGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Db 541 TGGTGTGGTGGCGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Qy 601 TGATGGCGCGCAACATCGAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Db 601 TGATGGCGCGCAACATCGAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Qy 661 TGGCACCGGATGAGTCTGGCGCGCGATGATCGAGCGCGCGACGT 705
Db 661 TGGCACCGGATGAGTCTGGCGCGCGATGATCGAGCGCGCGACGT 705

RESULT 14
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285.306A
```

```
; CURRENT FILING DATE: 1999-04-02
; EARLIER APLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      96.9%; Score 683; DB 9; Length 705;
Best Local Similarity 96.9%; Pred. No. 3.4e-150;
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCORGTGTCGGCG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCORGTGTCGGCG 60
Qy 61 CGATCAAGGAGTTCCTCGGCACCAAGCGAGCTGTCCCAAGTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCCTCGGCACCAAGCGAGCTGTCCCAAGTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGGGTCTGACCAACAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCG 180
Db 121 TGTGGGTCTGACCAACAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCG 180
Qy 181 AGCGGCGCGCTGGAGGTCGTGACGTGCACCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
Db 181 AGCGGCGCGCTGGAGGTCGTGACGTGCACCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 240
Qy 241 TCAGAGACCCGAGGTCCTCAACATCGGTGTGATCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
Db 241 TCAGAGACCCGAGGTCCTCAACATCGGTGTGATCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
Qy 301 TSAACCCGTTTCGGGTTTCATCGAGACCCGTTACCGCAAGGTCGTGCTGCTGCTGCTGCTGCTGCT 360
Db 301 TSAACCCGTTTCGGGTTTCATCGAGACCCGTTACCGCAAGGTCGTGCTGCTGCTGCTGCTGCTGCT 360
Qy 361 ACAGATCCACTACTCTGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 420
Db 361 ACAGATCCACTACTCTGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 420
Qy 421 CGCGATCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Db 421 CGCGATCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Qy 481 GCAGGTTCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540
Db 481 GCAGGTTCGAGTACGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540
Qy 541 TGGTGTGGTGGCGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Db 541 TGGTGTGGTGGCGACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Qy 601 TGATGGCGCGCAACATCGAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Db 601 TGATGGCGCGCAACATCGAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Qy 661 TGGCACCGGATGAGTCTGGCGCGCGATGATCGAGCGCGCGACGT 705
Db 661 TGGCACCGGATGAGTCTGGCGCGCGATGATCGAGCGCGCGACGT 705

RESULT 15
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US-09-285-306-11  
 ; Sequence 11, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gengeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 11  
 ; LENGTH: 705  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium avium  
 ; FEATURE:  
 ; NAME/KEY: modified base  
 ; LOCATION: (42)...(42)  
 ; OTHER INFORMATION: n = g,a,c or t  
 ; FEATURE:  
 ; NAME/KEY: modified base  
 ; LOCATION: (692)...(692)  
 ; OTHER INFORMATION: n = g,a,c or t  
 US-09-285-306-11

Query Match 96.9%; Score 683; DB 9; Length 705;  
 Best Local Similarity 97.3%; Pred. No. 3.4e-150;  
 Matches 686; Conservative 6; Mismatches 13; Indels 0; Gaps 0;  
 QY 1 CCCAGAGCTGAGCGGATCACACGAGACCCCTGATCAACATCCGTTCRGTGCGGG 60  
 Db 1 CCCAGAGCTGAGCGGATCACACGAGACCCCTGATCAACATCCGTTCRGTGCGGG 60  
 QY 61 CGATCAAGGAGTCTTCGGCACCGACAGCTGCTCCAGTTTCATGACACGAGACACCGGC 120  
 Db 61 CGATCAAGGAGTCTTCGGCACCGACAGCTGCTCCAGTTTCATGACACGAGACACCGGC 120  
 QY 121 TGTGGGTTTGACCCACAGCGCCCTGCTCGGCGCTGGGCGGCTGCTGTCTGTCGGGG 180  
 Db 121 TGTGGGTTTGACCCACAGCGCCCTGCTCGGCGCTGGGCGGCTGCTGTCTGTCGGGG 180  
 QY 181 AGCGGGCGGCTGAGTTCGTGACGTGACCGCTGACCGCTGACCGCTGACCGCTGACCG 240  
 Db 181 AGCGGGCGGCTGAGTTCGTGACGTGACCGCTGACCGCTGACCGCTGACCGCTGACCG 240  
 QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGGTGCTGCTGCTGCTGCTG 300  
 Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGGTGCTGCTGCTGCTGCTG 300  
 QY 301 TSAACCCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGCTGACGCTGTGCTCACCG 360  
 Db 301 TGAACCCGTTTCGGTTTCATCGAGACCCCGTACCGCAAGGTGCTGACGCTGTGCTCACCG 360  
 QY 361 ACAGATCCACTACTGACCGCGGACGAGGAGGACCGCACGTSGTGCGGAGGCCAACT 420  
 Db 361 ACAGATCCACTACTGACCGCGGACGAGGAGGACCGCACGTSGTGCGGAGGCCAACT 420  
 QY 421 CGCCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTGCTGCTCGCGSAGGCGG 480  
 Db 421 CGCCGATCGACGACAAAGGCGGTTTCGCGAGGCGGTTGCTGCTCGCGSAGGCGG 480  
 QY 481 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 540  
 Db 481 GCGAGGTCGAGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 540  
 QY 541 TGGTGTGCGTGGGCGACCGCGGATGATCCCGTTCTCTCGAGCAGACGACCGCCAAACCGTGC 600  
 Db 541 TGGTGTGCGTGGGCGACCGCGGATGATCCCGTTCTCTCGAGCAGACGACCGCCAAACCGTGC 600

QY 601 TGATGGGGCGCAACATGACGCGGCGGCGGCTTCGCTGCTGCGACGAGGCGCGCTGG 660  
 Db 601 TGATGGGGCGCAACATGACGCGGCGGCGGCTTCGCTGCTGCGACGAGGCGCGCTGG 660  
 QY 661 TGGGCAACCGGCGCATGGAGCTGCGCGGCGGCGATCGACGCGGCGGACGT 705  
 Db 661 TGGGCAACCGGCGCATGGAGCTGCGCGGCGGCGATCGACGCGGCGGACGT 705

Search completed: August 20, 2004, 01:36:45  
 Job time : 409.972 secs

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Result No.	Query			CONTAINS			Description
	Score	Match	Length	ID	ID	ID	
1	626	100.0	626	9	US-09-285-306-2	Sequence 2, Appl	
2	626	100.0	626	9	US-09-285-306-47	Sequence 47, Appl	
3	621.2	99.2	626	9	US-09-285-306-45	Sequence 45, Appl	
4	621.2	99.2	626	9	US-09-285-306-46	Sequence 46, Appl	
5	582.8	93.1	626	9	US-09-285-306-39	Sequence 39, Appl	
6	581.2	92.8	652	9	US-09-285-306-30	Sequence 30, Appl	
7	579.6	92.6	626	9	US-09-285-306-40	Sequence 40, Appl	
8	578	92.3	626	9	US-09-285-306-33	Sequence 33, Appl	
9	578	92.3	652	9	US-09-285-306-38	Sequence 38, Appl	
10	574.8	91.8	626	9	US-09-285-306-31	Sequence 31, Appl	
11	574.8	91.8	626	9	US-09-285-306-36	Sequence 36, Appl	
12	574.8	91.8	626	9	US-09-285-306-37	Sequence 37, Appl	
13	574.8	91.8	626	9	US-09-285-306-41	Sequence 41, Appl	
14	574.8	91.8	626	9	US-09-285-306-42	Sequence 42, Appl	

Query Match	100.0%;	Score 626;	DB 9;	Length 626;
Best Local Similarity	100.0%;	Pred. No. 4.3e-150;		
Matches 626;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	TCCGTCCCGTCTGTGGCGGATCAAGGAGTCTTCGGAAACCAGCCAGCTCTCGAGTTCA	60	
Ddb	1	TCCGTCCCGTCTGTGGCGGATCAAGGAGTCTTCGGAAACCAGCCAGCTCTCGAGTTCA	60	
QY	61	TGGACGAGAACAAACCCGCTGTCTGGGCGCTCACCACCAAGCGTCTGTCTGGCGCTGGGCC	120	
Ddb	61	TGGACGAGAACAAACCCGCTGTCTGGGCGCTCACCACCAAGCGTCTGTCTGGCGCTGGGCC	120	
QY	121	CCGTGGTGTCTGACCCGTGACCCGCGCGGCGCTCTAGAGTCCGGACGTGCACCCCTCGCACT	180	
Ddb	121	CCGTGGTGTCTGACCCGTGACCCGCGCGGCGCTCTAGAGTCCGGACGTGCACCCCTCGCACT	180	

QY	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240	Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240
Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240	QY	241	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAGAGCCCTTACCGAAGGTCT	300
QY	241	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAGAGCCCTTACCGAAGGTCT	300	Db	241	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAGAGCCCTTACCGAAGGTCT	300
Db	241	TGTCGGTGTACGCGGGGTCAACCCGTTCCGTTTCATCGAGAGCCCTTACCGAAGGTCT	300	QY	301	CGGACGGAGTTGTACCGAGCATCCACTTACCTGACGGCCGACGAAGAGGACCGCCACG	360
QY	301	CGGACGGAGTTGTACCGAGCATCCACTTACCTGACGGCCGACGAAGAGGACCGCCACG	360	Db	301	CGGACGGAGTTGTACCGAGCATCCACTTACCTGACGGCCGACGAAGAGGACCGCCACG	360
Db	301	CGGACGGAGTTGTACCGAGCATCCACTTACCTGACGGCCGACGAAGAGGACCGCCACG	360	QY	361	TGTCGGCGCAGGCAACTCGCCCGTGGACGCGCCAAACCGCCGCTTCAACGAGGAGAATCC	420
QY	361	TGTCGGCGCAGGCAACTCGCCCGTGGACGCGCCAAACCGCCGCTTCAACGAGGAGAATCC	420	Db	361	TGTCGGCGCAGGCAACTCGCCCGTGGACGCGCCAAACCGCCGCTTCAACGAGGAGAATCC	420
Db	361	TGTCGGCGCAGGCAACTCGCCCGTGGACGCGCCAAACCGCCGCTTCAACGAGGAGAATCC	420	QY	421	TGTCGGCGCAGGCGGAGGTGGAGTTCGTTCCGCGACCGAGGTGCACTACATGG	480
QY	421	TGTCGGCGCAGGCGGAGGTGGAGTTCGTTCCGCGACCGAGGTGCACTACATGG	480	Db	421	TGTCGGCGCAGGCGGAGGTGGAGTTCGTTCCGCGACCGAGGTGCACTACATGG	480
Db	421	TGTCGGCGCAGGCGGAGGTGGAGTTCGTTCCGCGACCGAGGTGCACTACATGG	480	QY	481	ATGTCGCGCGCCAGATGCTGTCGTCGCGACCGCATGATCCCGTTCTTCGAGCACG	540
QY	481	ATGTCGCGCGCCAGATGCTGTCGTCGCGACCGCATGATCCCGTTCTTCGAGCACG	540	Db	481	ATGTCGCGCGCCAGATGCTGTCGTCGCGACCGCATGATCCCGTTCTTCGAGCACG	540
Db	481	ATGTCGCGCGCCAGATGCTGTCGTCGCGACCGCATGATCCCGTTCTTCGAGCACG	540	QY	541	ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGCGGTTCGCGTGTGC	600
QY	541	ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGCGGTTCGCGTGTGC	600	Db	541	ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGCGGTTCGCGTGTGC	600
Db	541	ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGCGGTTCGCGTGTGC	600	QY	601	GTAGCGAGGTCCTCGTTCGGTACC	626
QY	601	GTAGCGAGGTCCTCGTTCGGTACC	626	Db	601	GTAGCGAGGTCCTCGTTCGGTACC	626
Db	601	GTAGCGAGGTCCTCGTTCGGTACC	626	RESULT 3			
US-09-285-306-45				US-09-285-306-45			
; Sequence 45, Application US/09285306A				; Sequence 45, Application US/09285306A			
; Publication No. US20020187467A1				; Publication No. US20020187467A1			
GENERAL INFORMATION:				GENERAL INFORMATION:			
APPLICANT: Gingeras, Thomas				APPLICANT: Gingeras, Thomas			
APPLICANT: Drenkow, Jorg				APPLICANT: Drenkow, Jorg			
TITLE OF INVENTION: Mycobacterial rpoB Sequences				TITLE OF INVENTION: Mycobacterial rpoB Sequences			
FILE REFERENCE: 018547-018570US				FILE REFERENCE: 018547-018570US			
CURRENT APPLICATION NUMBER: US/09/285,306A				CURRENT APPLICATION NUMBER: US/09/285,306A			
CURRENT FILING DATE: 1999-04-02				CURRENT FILING DATE: 1999-04-02			
EARLIER APPLICATION NUMBER: US 60/080,616				EARLIER APPLICATION NUMBER: US 60/080,616			
EARLIER FILING DATE: 1998-04-03				EARLIER FILING DATE: 1998-04-03			
NUMBER OF SEQ ID NOS: 181				NUMBER OF SEQ ID NOS: 181			
SOFTWARE: FastSeq for Windows Version 3.0				SOFTWARE: FastSeq for Windows Version 3.0			
SEQ ID NO 45				SEQ ID NO 45			
LENGTH: 626				LENGTH: 626			
TYPE: DNA				TYPE: DNA			
ORGANISM: Mycobacterium chelonae				ORGANISM: Mycobacterium chelonae			
US-09-285-306-45				US-09-285-306-45			
Query Match 99.2%; Score 621.2; DB 9; Length 626;				Query Match 99.2%; Score 621.2; DB 9; Length 626;			
Best Local Similarity 99.5%; Pred. No. 7.3e-149;				Best Local Similarity 99.5%; Pred. No. 7.3e-149;			
Matches 523; Conservative 0; Mismatches 3; Indels 0; Gaps 0;				Matches 523; Conservative 0; Mismatches 3; Indels 0; Gaps 0;			
QY	1	TCCGTCCCGTCTGTCGGCGGATCAAGGAGTTCTTCGGAACGACGAGCTGTGCGAGTTCA	60	QY	1	TCCGTCCCGTCTGTCGGCGGATCAAGGAGTTCTTCGGAACGACGAGCTGTGCGAGTTCA	60
Db	1	TCCGTCCCGTCTGTCGGCGGATCAAGGAGTTCTTCGGAACGACGAGCTGTGCGAGTTCA	60	Db	1	TCCGTCCCGTCTGTCGGCGGATCAAGGAGTTCTTCGGAACGACGAGCTGTGCGAGTTCA	60
QY	61	TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCCAAGCGTCTGTGCGGCTGGGCC	120	QY	61	TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCCAAGCGTCTGTGCGGCTGGGCC	120
Db	61	TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCCAAGCGTCTGTGCGGCTGGGCC	120	Db	61	TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCCAAGCGTCTGTGCGGCTGGGCC	120
QY	121	CCGGTGGTGTGACCCCGTACCGCGCGGCTCGAGGTCCGCGACGTCGACCCCTCGCACT	180	QY	121	CCGGTGGTGTGACCCCGTACCGCGCGGCTCGAGGTCCGCGACGTCGACCCCTCGCACT	180
Db	121	CCGGTGGTGTGACCCCGTACCGCGCGGCTCGAGGTCCGCGACGTCGACCCCTCGCACT	180	Db	121	CCGGTGGTGTGACCCCGTACCGCGCGGCTCGAGGTCCGCGACGTCGACCCCTCGCACT	180
QY	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240	QY	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240
Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240	Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCGAACATCGGCTGATCGGCTCGC	240

Qy	241	TGTCGGTGTA	CGCGGGGFOAAC	CCCGTTCCGTTTCATCGAGACGC	CTTACCGGAAGGTC	300
Db	241	TGTCGGTGTA	CGCGCGCGTCAAC	CCCGTTCCGTTTCATCGAGACGC	CTTACCGGAAGGTC	300
Qy	301	CGGACGGAGTTG	TACCCAGCACAT	CCACTCTGACGGCCGACGAGGAC	CCGCCACG	360
Db	301	CGGACGGAGTTG	TACCCAGCAGAT	CCACTCTGACGGCCGACGAGGAC	CCGCCACG	360
Qy	361	TGTTGGGCG	AGGCCAACTCGCCCGTGGACGCCAA	CGGCGCTTCCCGAGGAGAGATCC	420	
Db	361	TGTTGGGCG	AGGCCAACTCGCCCGTGGACGCCAA	CGGCGCTTCCCGAGGAGAGATCC	420	
Qy	421	TGTTTCGCGCG	CAAGGGCGCGAGGTGGAGTT	TCGTCTCGGCACCGAGGTCTGACTACATGG	480	
Db	421	TGTTTCGCGCG	CAAGGGCGCGAGGTGGAGTT	TCGTCTCGGCACCGAGGTCTGACTACATGG	480	
Qy	481	ATGTCTCGCGCG	CCAGATGTGTGGTCTGCGACCGCCATGAT	CCGGTTCTCTCGAGGACG	540	
Db	481	ATGTTTCGCGCG	CCAGATGTGTGGTCTGCGACCGCCATGAT	CCCGTTCTCTCGAGGACG	540	
Qy	541	ACGACGCCAAC	CGTGCCCTCATGGTGCCAACTGCAGCGCCAGCGGTTC	CGCTGGGTGC	600	
Db	541	ACGACGCCAAC	CGTGCCCTCATGGTGCCAACTGCAGCGCCAGCGGTTC	CGCTGGGTGC	600	
Qy	601	GTAGCAGGCT	CCGCTGGTGCTTACC	626		
Db	601	GTAGCAGGCT	CCGCTGGTGCTTACC	626		

```

RESULT 4
US-09-285-306-46
; Sequence 46, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 46
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-46

```

Query Match	99.2%;	Score	621.2;	DB	9;	Length	626;
Best Local Similarity	99.5%;	Pred. No.	7.3e-149;				
Matches	623;	Conservative	0;	Mismatches	3;	Indels	0;
						Gaps	0;
QY	1	TCGCTCCCGTGTGGCGGCGATCAAGAGGTTCTTCGGAACAGCCAGCTGTCCGAGTTCA	60				
dbb	1	TCGCTCCCGTGTGGCGGCGATCAAGAGGTTCTTCGGAACAGCCAGCTGTCCGAGTTCA	60				
QY	61	TGACCCAGAACAAACCCGCTGTTCGGGCTGACCAACAAGCGTCTGTTCGGCGCTGGGCC	120				
dbb	61	TGACCCAGAACAAACCCGCTGTTCGGGCTGACCAACAAGCGTCTGTTCGGCGCTGGGCC	120				
QY	121	CCGGTGGTCTGACCCGTGTACCGCGCGCGGCTTCAGGTCGCGGAGGTGCACCCCTCGCACT	180				
dbb	121	CCGGTGGTCTGACCCGTGTACCGCGCGCGGCTTCAGGTCGCGGAGGTGCACCCCTCGCACT	180				
QY	181	ACGGCGCATGTGCCCGATTCGAGACCCCGGAAGCCCGCAACATCTGGCTCATCGGCTCGC	240				
dbb	181	ACGGCGCATGTGCCCGATTCGAGACCCCGGAAGCCCGCAACATCTGGCTCATCGGCTCGC	240				
QY	241	TGTCGGTGTACGGCGGGGTCAACCCGTTCCGTTTTCATCGAGACGCCCTTACCGGAAGGTCT	300				

Db	241	TGTCGGTGTACGGCGCGTCAACCGCTTCGGTTTCATCGAGAGCGCTTACCGAAGGTCT	300
QY	301	CGGACGGAGTTGTACCGACGACATCCACTACTGTACGGCCGACGAAGAGGACCGGCACG	360
Db	301	CGGACGGAGTTGTCAACGACGAGATCCACTACTGTACGGCCGACGAAGAGGACCGGCACG	360
QY	361	TGGTGGCGCAGCCCAACTCGCCCGTGGACGCCAAACGGCCGCTTACCGGAGGAGAGATCC	420
Db	361	TGGTGGCGCAGCCCAACTCGCCCGTGGACGCCAAACGGCCGCTTACCGGAGGAGAGATCC	420
QY	421	TGGTTCCGCGCAAGGGCGCGAGGTGGAGTTCGTGTCCGCGCACCGAGGTCCGACTACATGG	480
Db	421	TGGTTCCGCGCAAGGGCGCGAGGTGGAGTTCGTGTCCGCGCACCGAGGTTCGACTACATGG	480
QY	481	ATGTCCTCGCCGCGCCAGATGTTGTGCGTTCGGACCGCCATGATCCCGTTCCTCGAGCACG	540
Db	481	ATGTTTCGCGCGCGCCAGATGTTGTGCGTTCGGACCGCCATGATCCCGTTCCTCGAGCACG	540
QY	541	ACGACGCCAACCGTGCCCTCATGGTGCACCATGACGCGCACCGGTTCGCTGGTGC	600
Db	541	ACGACGCCAACCGTGCCCTCATGGTGCACCATGACGCGCACCGGTTCGCTGGTGC	600
QY	601	GTAGCAGGCTCCGTGTCGGTACC	626
Db	601	GTAGCAGGCTCCGTGTCGGTACC	626

```

RESULT 5
US -09-285-306-39
; Sequence 39, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingetas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 191
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 39
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US -09-285-306-39

```

Query Match	93.1%;	Score 582.8;	DB 9;	Length 626;
Best Local Similarity	95.7%;	Pred. No. 4.4e-139;		
Matches 599;	Conservative 0;	Mismatches 27;	Indels 0;	Gaps 0;
QY	1	TCGCTCCCGTCTGTCGGCGCATCAAGAGATTCTTCGGAACAGGCAGCTGTCGAGTTCA	60	
Db	1	TCGCTCCCGTCTGTCGGCGCATCAAGAGATTCTTCGGAACAGGCAGCTGTCGAGTTCA	60	
QY	61	TGGACCAAGAAACCCGCTCTGCGGCTGACCCACACAGACGTCGTCTCTCGGCGCTGGGCC	120	
Db	61	TGGACCAAGAAACCCGCTCTGCGGCTGACCCACACAGACGTCGTCTCTCGGCGCTGGGCC	120	
QY	121	CCGGTGGTCTGACCCCGTGACCGCGCGGCTCTGAGGTCCTCGGACGTCGCACCCCTCGGCAT	180	
Db	121	CCGGTGGTCTGACCCCGTGACCGCGCGGCTCTGAGGTCCTCGGACGTCGCACCCCTCGGCAT	180	
QY	181	ACGGCCGATGTGCCCGATCGAGACCCCGAAGGCCCGGACATCGGCCTCATCGGCTCGC	240	
Db	181	ACGGCCGATGTGCCCGATCGAGACCCCGAAGGCCCGGACATCGGCTCATCGGCTCGC	240	
QY	241	TGTCGGTGTACCGCGGGTCAACCCGTTGCTGTTCTACGAGACGCCTTACCGGAAGGTCT	300	
Db	241	TGTCGGTGTACCGCGGGTCAACCCGTTGCTGTTCTACGAGACGCCTTACCGGAAGGTGT	300	

QY	301	CGGACGGAGTTGTACCGACGACATCCACTACCTGACGCGCGACGAAGAGGACCGCCACG	350
Db	301	CCGAGGGTGTGTCACCGACGACATCCACTACCTGACGCGCGACGAAGAGGACCGCCACG	360
QY	361	TGTTGGCGAGGCGCAACTGCGCGGTGAGCGCCAAACGCGCGCTTCACCGAGGAGATCC	420
Db	361	TCGTTGGCACAGGCCAACTCGCGCTGTGAGCGCCGACGCGCGCTTCACCGAGGACAGATCC	420
QY	421	TGTTTCGCGCGCAAGGCGCGAGGTGGAGTTTCGTTGTCGGCGACCGAGGTGCACTACATGG	480
Db	421	TGTTTCGCGCGTAAAGGTGGGAGGTTCGAGTTTCGTTCTCGGCGACCGAGGTGCACTACATGG	480
QY	481	ATGTTCTCGCGCGCCGACAGATGGTTCGTTGTCGCGACCGCCATGATCCCGTTCTCGAGCACG	540
Db	481	ACGTTCTCGCGCGCCGACAGATGGTTCGTTGTCGCGACCGCCATGATCCCGTTCTCGAGCACG	540
QY	541	ACGACGCCAACCGTGCCTCATGGTGCACATGAGCGCCAGGCGGTTCCGCTGGTGC	600
Db	541	ACGACGCCAACCGTGCCTCATGGTGCACATGAGCGCCAGGCGGTTCCGCTGGTGC	600
QY	601	GTAGCGAGGTCCTCGTGGTCCGTACC	626
Db	601	GCAGCGAGGCCCGCTGGTCCGTACC	626
RESULT 6			
US-09-285-306-30			
; Sequence 30, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285.306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080.616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSEQ for Windows Version 3.0			
; SEQ ID NO 30			
; LENGTH: 652			
; TYPE: DNA			
; ORGANISM: Mycobacterium chelonae			
US-09-285-306-30			
Query Match 92.8%; Score 581.2; DB 9; Length 652;			
Best Local Similarity 95.5%; Pred. No. 1.1e-138;			
Matches 598; Conservative 0; Mismatches 28; Indels 0; Gaps 0;			
QY	1	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCAAGCGCTGTGCGAGTTCA	60
Db	19	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCAAGCGCTGTGCGAGTTCA	78
QY	61	TGGACCAAGAACACCGCTGTGCGGCTGACCCCAAGCGTCTGTGCGGCGTGGGCC	120
Db	79	TGGACCAAGAACACCGCTGTGCGGCTGACCCCAAGCGTCTGTGCGGCGTGGGCC	138
QY	121	CCGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTTCGGGACGTGCAACCGCTCGCACT	180
Db	139	CCGGTGGTCTGACTCGTAGCCGCGCGCTTGGGTTCGAGTTCGCGACGTGCAACCGCTCGCACT	198
QY	181	ACGCGCGCATGTGCCGATCGAGACCCCGGAAGGCGCGAATCGGCTGATCGCTCGC	240
Db	199	ACGCGCGCATGTGCCGATCGAGACCCCGGAAGGCGCGAATCGGCTGATCGCTCGC	258
QY	241	TGTCGGTGTACCGCGGGTCAACCGCTTGGTTTCATCGAGACGCTTACCGGAGGTCT	300
Db	259	TGTCGGTGTACCGCGGGTCAACCGCTTGGTTTCATCGAGACGCTTACCGGAGGTCT	318
QY	301	CGGACGAGTGTGTCACCGAGCATCCACTACTGACGCGCGACGAAGAGGACCGCCACG	360

Db	319	CCGAGGGTGTGCTCACCAGCAGATCCACTACCTGACGCGCGACGAAGAGGACCGCCACG	378
QY	361	TGTTGGCGAGGCGCAACTGCGCGGTGGAGCGCCAAACGCGCGCTTCACCGAGGAGATCC	420
Db	379	TGTTGGCGAGGCGCAACTGCGCTGTGAGTCGCCGATGCCGACGCGCGCTTCACCGAGGACAGATCC	438
QY	421	TGTTTCGCGCGCAAGGCGCGAGGTGGAGTTCGTTGTCGGCGACCGAGGTGCACTACATGG	480
Db	439	TGTTTCGCGCGTAAAGGTGGGAGGTTCGAGTTTCGTTCTCGGCGACCGAGGTGCACTACATGG	498
QY	481	ATGTTCTCGCGCGCCGACAGATGGTTCGTTGTCGCGACCGCCATGATCCCGTTCTCGAGCACG	540
Db	499	ACGTTCTCGCGCGCCGACAGATGGTTCGTTGTCGCGACCGCCATGATCCCGTTCTCGAGCACG	558
QY	541	ACGACGCCAACCGTGCCTCATGGTGCACATGAGCGCCAGGCGGTTCCGCTGGTGC	600
Db	559	ACGACGCCAACCGTGCCTCATGGTGCACATGAGCGCCAGGCGGTTCCGCTGGTGC	618
QY	601	GTAGCGAGGTCCTCGTGGTCCGTACC	626
Db	619	GCAGCGAGGCCCGCTGGTCCGTACC	644
RESULT 7			
US-09-285-306-40			
; Sequence 40, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285.306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080.616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSEQ for Windows Version 3.0			
; SEQ ID NO 40			
; LENGTH: 626			
; TYPE: DNA			
; ORGANISM: Mycobacterium chelonae			
US-09-285-306-40			
Query Match 92.6%; Score 579.6; DB 9; Length 626;			
Best Local Similarity 95.4%; Pred. No. 2.9e-138;			
Matches 597; Conservative 0; Mismatches 29; Indels 0; Gaps 0;			
QY	1	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCAAGCGCTGTGCGAGTTCA	60
Db	1	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCAAGCGCTGTGCGAGTTCA	60
QY	61	TGGACCAAGAACACCGCTGTGCGGCTGACCCCAAGCGTCTGTGCGGCGTGGGCC	120
Db	61	TGGACCAAGAACACCGCTGTGCGGCTGACCCCAAGCGTCTGTGCGGCGTGGGCC	120
QY	121	CCGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTTCGGGACGTGCAACCGCTCGCACT	180
Db	121	CCGGTGGTCTGACCGCTGACCGCGCGCTTGGAGTTCGCGACGTGCAACCGCTCGCACT	180
QY	181	ACGCGCGCATGTGCCGATCGAGACCCCGGAAGGCGCGAATCGGCTGATCGGCTCGC	240
Db	181	ACGCGCGCATGTGCCGATCGAGACCCCGGAAGGCGCGAATCGGCTGATCGGCTCGC	240
QY	241	TGTCGGTGTACCGCGGGTCAACCGCTTGGTTTCATCGAGACGCTTACCGGAGGTCT	300
Db	241	TGTCGGTGTACCGCGGGTCAACCGCTTGGTTTCATCGAGACGCTTACCGGAGGTCT	300
QY	301	CGGACGAGTGTGTCACCGAGCATCCACTACTGACGCGCGACGAAGAGGACCGCCACG	360
Db	301	CCGAGGGTGTGTCACCGAGCATCCACTACTGACGCGCGACGAAGAGGACCGCCACG	360

QY	361	TGTTGGCGCAGCCAACTCGCCCGTGGACGCCAAGCGCGCTTCAACCGAGGAGAAATCC	420
Db	361	TGTTGGCGCAGCCAACTCGCTGTGGATGCGCAGCGCGCTTCAACCGAGGACAAATCC	420
QY	421	TGTTTCGGCGCAAGGGCGCGAGGTGGATTCGTCTCGCGACCGAGTTCGACTACATGG	480
Db	421	TGTTCCGCGCTAAGGGTGGCGAGTTCGATTCGTCTCGCGACCGAGTGGACTACATGG	480
QY	481	ATGTTCTCGCGCGCGCAGATAGTGTGCGTTCGCGACCGCCATGATCCCGTTCTCTCGAGCAGC	540
Db	481	ACGTTCTCGCGCGCGCAGATGGTGTGCGTTCGCGACCGCCATGATCCCGTTCTCTCGAGCAGC	540
QY	541	ACGACGCCAACCGTGCCTCATGGTGCACATCGACGCCAGCGCTTCGGCTGGTGC	600
Db	541	ACGACGCCAACCGTGCCTCATGGTGCACATCGACGCCAGCGCTTCGGCTGGTGC	600
QY	601	GTACGAGGCTCCGCTGGCTGCTACC	626
Db	601	GCACGAGGCCCGCTGGTCCGCTACC	626

## RESULT 8

```

US-09-285-306-33
; Sequence 33, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpo
; FILE REFERENCE: 018547-018570HS
; CURRENT APPLICATION NUMBER: US/09/285
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version
; SEQ ID NO 33
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-33

```

Query Match	92.3%;	Score 578;	DB 9;	Length 626;
Best Local Similarity	95.2%;	Pred. No. 7.3e-138;		
Matches 596;	Conservative 0;	Mismatches 30;	Indels 0;	Gaps 0;
QY	1	TCCGTCGGTCTGGCGGCGATCAAGAGATTCTTGGGAACAGCCAGCTGTGCGAGTTCA	60	
Db	1	TCCGTCGGTCTGGCGGCGATCAAGAGATTCTTGGGAACAGCCAGCTGTGCGAGTTCA	60	
QY	61	TGGACAGAGAACAACCGCTGTGCGGCGTGACCCACAAGCGTCTGTGTCGGCGCTGGGC	120	
Db	61	TGGACAGAGAACAACCGCTGTGCGGCGTGACCCACAAGCGTCTGTGTCGGCGCTGGGC	120	
QY	121	CCGGTGGTCTGACCCGTGACCGCGCGGCTCGAGTCCGCGAGCTGCACCCCTCGCACT	180	
Db	121	CCGGTGGTCTGACCCGTGACCGCGCGGCTTGAGTCTCGCGAGCTGCACCCCTCGCACT	180	
QY	181	ACGGCCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGCGCTGATCGGCTCGC	240	
Db	181	ACGGCCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGCGCTGATCGGCTCGC	240	
QY	241	TGTCGGTGTACGCGCGGGTCAACCCGTTTCATCGAGACGCGCTTACCGGAAGGCTCT	300	
Db	241	TGTCGGTGTACGCGCGGGTCAACCCGTTTCATCGAGACGCGCTTACCGGAAGGCTCT	300	
QY	301	CGGACGGAGTTGTACCGGACGACATCCACTACTGACGGCCGACGAAGGACCGCCACG	360	
Db	301	CGGAGGGTGTGCTACCGGACGAGATCCACTACTGACCGCCGACGAAGGACCGCCACG	360	
QY	361	TGGTGGCGAGGCCAACTCGCCCGTGGACGCCAAAGCGCGCTTACCGAGGAAGATCC	420	

	Db	361	TCGTGGCAGGCCAACTCGCCTGTGGATGCCGACGGCCGCTTACCGAGGACAAGATCC	420
Qy	421	Qy	TGGTTCGGCCGGAAGGGCGCGGAGGTGGAGTTCGTCTCGCGCAGCCGAGGTCGACTACATGG	480
Db	421	Db	TGGTCCGGCCGTAAGGGTGGCGAGGTCGAGTTTCGTCTCGCGCAGCCGAGGTGGACTACATGG	480
Qy	481	Qy	ATGTCTCGCCCGCGGCAGATGCTGTGCGTTCGGACCGCCATGATCCCGTTCCTTCGAGCAGCG	540
Db	481	Db	ACGTCTCGCCCGCGCAATGGTGTGCGTTCGGACCGCCATGATCCCGTTCCTTCGAGCAGCG	540
Qy	541	Qy	ACGAGCGCAACGGTGCCTCATGGTGCACAATGCAGCGCCAGCGGTTCCGCTGGGTGC	600
Db	541	Db	ACGAGCGCAACGGTGCCTCATGGTGCACAATGCAGCGCCAGCGGTTCCGCTGGGTGC	600
Qy	601	Qy	GTACGAGGGTTCGCTGGTCCGTATCC	626
Db	601	Db	GCACGAGGCCCGCTGGTCCGTATCC	626

## RESULT 9

```

US-09-285-306-38
; Sequence 38, Application US/09285306A
; Publication No. US20020187457A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 652
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-38

```

Query Match	92.3%	Score 578;	DB 9;	Length 652;
Best Local Similarity	95.2%;	Pred. No. 7.3e-138;		
Matches 596;	Conservative 0;	Mismatches 30;	Indels 0;	Gaps 0;
QY	1	TC CGTCCCGTCTGGCGGGGATCAAGAGTTCTTCGGAACACCGACGCTGTCGCAAGTTC	60	
Db	18	TC CGTCCCGTCTGGCGGGGATCAAGAGTTCTTCGGAACACCGACGCTGTCGCAAGTTC	77	
QY	61	TG GACAGAAACACCCGCTGTCTGGGGCTTACCCACAAGCGTCTGTCTGGCGCTGGGCC	120	
Db	78	TG GACAGAAACACCCGCTGTGGGTCTGACCCACAAAGCGTCTGTCTGGCGCTGGGCC	137	
QY	121	CC GGTGGTCTGACCCGTGACCGCGCGGCTCTGAGTCCGCGACGTCGACCCCTCGCACT	180	
Db	138	CC GGTGGTCTGACCCGTGACCGCGCGGCTTCTAGTCCGCGACGTCGACCCCTCGCACT	197	
QY	181	AC GGGCGGATGTCCCGATCGAGACCCCGAAGGCCGGAACATCGGCCTGATCGGCTCGC	240	
Db	198	AC GGGCGGATGTGCCCGATCGAGACCCCGAAGGCCGGAACATCGGCCTGATCGGTTCCG	257	
QY	241	TCTCGGTGTACCGCGGGGTCAACCCGTTCTGCGTTTCATCGAGACGCTTACCGGAAGTCT	300	
Db	258	TGTCCGTTGATCCGCGGGGTCAACCCGTTCTGCGTTTCATCGAGACGCGGTACCGCAAGTGT	317	
QY	301	CG GA CGGAGTTGTACCGACGACATCCACTACTACGCGCCGACGAAGAGGACCGGCACG	360	
Db	318	CC GAGGTGTCTGTCACCGACGAGATCCACTACTCTGACCGCGACGAGAGACCGCCACG	377	
QY	361	TG GTGGCGACGGCCAACTCGCCCGTGGAGCCCAACGGCCGCTTCCCGAGGAGAAATCC	420	
Db	378	TC GTGGCACAGGCCAACTCGCGTGGATGCGGACGGCCGCTTCCCGAGGACAAATCC	437	

421 TGTTTCGCCGCAAGGGCGGAGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 480  
438 TGTTTCGCCGCAAGGGTGGAGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 497  
481 ATGTCTCGCGCGCAGATGGTGTTCGGTTCGGACCGCCATGATCCCGTTCTTCGAGCACG 540  
498 ACGTCTCGCGCGCAGATGGTGTTCGGTTCGGTTCGGACCGCCATGATCCCGTTCTTCGAGCACG 557  
541 ACCAGCGCAACCGTGCCTCATGGTGCACCAATGACGAGCGCCAGGCGGTTCCGCTGGTGC 600  
558 ACCAGCGCAACCGTGCCTCATGGTGCACCAATGACGAGCGCCAGGCGGTTCCGCTGGTGC 617  
601 GTACGAGGCTCCGCTGTTCGGTACC 626  
618 GCAGCGAGGCGGCTGTTCGGTACC 643

RESULT 10  
US-09-285-306-31  
; Sequence 31, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 31  
; LENGTH: 626  
; TYPE: DNA  
; ORGANISM: Mycobacterium chelonae  
US-09-285-306-31

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 4.8e-137;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

421 TCCGTCCCGTCTGTGGCGGATCAAGAGTTCTTCGGAACCGAGCGTGTGCGAGTTCA 60  
421 TCCGTCCCGTCTGTGGCGGATCAAGAGTTCTTCGGAACCGAGCGTGTGCGAGTTCA 60  
61 TGGACCAAGAACCCGCTGTGGGCTGACCCCAAGCGTCTGTTCGGCGCTGGGCG 120  
61 TGGACCAAGAACCCGCTTTCCGGTCTGACCCCAAGCGTCTGTTCGGCGCTGGGCG 120  
121 CCGGTGTCTGACCGGTGACCGGCTGAGGTTCGGCGCTGACCGGCTGCGACT 180  
121 CCGGTGTCTGACCGGTGACCGGCTGAGGTTCGGCGCTGACCGGCTGCGACT 180  
181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCGCCGAACATCGGCTGTGCGCTCGC 240  
181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCGCCGAACATCGGCTGTGCGCTCGC 240  
241 TGTCCGTGTACCGCGGTTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTTCT 300  
241 TTTCCGTGTACCGCGGTTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTTCT 300  
301 CCGAGGAGTTGTACCGAGGATCCACTACTGACCGCGGAGGAGGAGGAGGAGGAGGAGG 360  
301 CCGAGGAGTTGTACCGAGGATCCACTACTGACCGCGGAGGAGGAGGAGGAGGAGGAGG 360  
361 TGTGCGCAGGCGCAACTCGCCGTGTGAGCGCCAAACCGCGCTTACCGAGGAGGAGGAGG 420  
361 TGTGCGCAGGCGCAACTCGCCGTGTGAGCGCCAAACCGCGCTTACCGAGGAGGAGGAGG 420  
421 TGGTTCCCGCGCAAGGGCGGAGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 480

421 TGTTTCGCCGCAAGGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 480  
481 ATGTCTCGCGCGCAGATGGTGTTCGGTTCGGACCGCCATGATCCCGTTCTTCGAGCACG 540  
481 ACGTCTCGCGCGCAGATGGTGTTCGGTTCGGTTCGGACCGCCATGATCCCGTTCTTCGAGCACG 540  
541 ACCAGCGCAACCGTGCCTCATGGTGCACCAATGACGAGCGCCAGGCGGTTCCGCTGGTGC 600  
541 ACCAGCGCAACCGTGCCTCATGGTGCACCAATGACGAGCGCCAGGCGGTTCCGCTGGTGC 600  
601 GTACGAGGCTCCGCTGTTCGGTACC 626  
601 GCAGCGAGGCGGCTGTTCGGTACC 626

RESULT 11  
US-09-285-306-36  
; Sequence 36, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 36  
; LENGTH: 626  
; TYPE: DNA  
; ORGANISM: Mycobacterium chelonae  
US-09-285-306-36

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 4.8e-137;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

1 TCCGTCCCGTCTGTGGCGGATCAAGAGTTCTTCGGAACCGAGCGTGTGCGAGTTCA 60  
1 TCCGTCCCGTCTGTGGCGGATCAAGAGTTCTTCGGAACCGAGCGTGTGCGAGTTCA 60  
61 TGGACCAAGAACCCGCTGTGGGCTGACCCCAAGCGTCTGTTCGGCGCTGGGCG 120  
61 TGGACCAAGAACCCGCTTTCCGGTCTGACCCCAAGCGTCTGTTCGGCGCTGGGCG 120  
121 CCGGTGTCTGACCGGTGACCGGCTGAGGTTCGGCGCTGACCGGCTGCGACT 180  
121 CCGGTGTCTGACCGGTGACCGGCTGAGGTTCGGCGCTGACCGGCTGCGACT 180  
181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCGCCGAACATCGGCTGTGCGCTCGC 240  
181 ACGGCGCATGTGCCGATCGAGACCCCGAAGCGCCGAACATCGGCTGTGCGCTCGC 240  
241 TGTCCGTGTACCGCGGTTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTTCT 300  
241 TTTCCGTGTACCGCGGTTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTTCT 300  
301 CCGAGGAGTTGTACCGAGGATCCACTACTGACCGCGGAGGAGGAGGAGGAGGAGGAGG 360  
301 CCGAGGAGTTGTACCGAGGATCCACTACTGACCGCGGAGGAGGAGGAGGAGGAGGAGG 360  
361 TGTGCGCAGGCGCAACTCGCCGTGTGAGCGCCAAACCGCGCTTACCGAGGAGGAGGATCC 420  
361 TGTGCGCAGGCGCAACTCGCCGTGTGAGCGCCAAACCGCGCTTACCGAGGAGGAGGATCC 420  
421 TGGTTCCCGCGCAAGGGCGGAGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 480  
421 TGGTTCCCGCGCAAGGGTGGAGTTCTGTTCGGCGACCGAGGTGCATACATGG 480

QY 481 ATGCTCTGCGCGCCAGATGGTCTCGGTCCGACCCCATGATCCCGTTCTCTCGAGCAG 540  
Db 481 ACGTCTGCGCGCCAGATGGTCTCGGTCCGACCCCATGATCCCGTTCTCTCGAGCAG 540  
QY 541 ACGACGCCAACCGTCCCTCATGGTGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGC 600  
Db 541 ACGACGCCAACCGTCCCTCATGGTGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGC 600  
QY 601 GTAGCAGGCTCGCTGGTTCGGTACC 626  
Db 601 GCAGCGAGGCCCGCTGGTTCGGTACC 626

## RESULT 12

US-09-285-306-37

; Sequence 37, Application US/09285306A  
; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 37

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-37

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 4.8e-137;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60  
Db 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60  
QY 61 TGGACCAAGAACACCCGCTGTCGGGCTGACCAAGCGTGTGTCGGGCTGGGCC 120  
Db 61 TGGACCAAGAACACCCGCTTTCGGGCTGACCAAGCGTGTGTCGGGCTGGGCC 120  
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 180  
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCTGGCTTGAGGTTCGCGAGCTGCACCCCTCGCACT 180  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Db 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
QY 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGAAGGTCT 300  
Db 241 TTTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGAAGGTGT 300  
QY 301 CGGACGAGTTGTTCACCGACGATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360  
Db 301 CCGAGGTGTGCTCACCGACGATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360  
QY 361 TGGTGGCGAGGCGMACTCGCCGCTGGACGCAACCGCGCTTCAACGAGGAGAGATCC 420  
Db 361 TCGTGGCACAGGCGCAACTCGCTGTGGATCGCGACGGCGCTTCAACGAGGACAGATCC 420  
QY 421 TGGTTCGCGCAAGGCGGAGGTGGAGTTCGTTTCGTCGCGACCGAGTGCATACATGG 480  
Db 421 TGGTTCGCGCGTAAAGGTTGGCGAGTTCGTTTCGTCGCGACCGAGTGCATACATGG 480  
QY 481 ATGTCTCGCGCGCCAGATGGTGTGGTTCGGTCCGACCGCCATGATCCCGTTCTCTCGAGCAG 540

Db 481 ACGTCTCGCGCGCCAGATGGTGTGGTCCGACCCCATGATCCCGTTCTCTCGAGCAG 540  
QY 541 ACGACGCCAACCGTCCCTCATGGTGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGC 600  
Db 541 ACGACGCCAACCGTCCCTCATGGTGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGC 600  
QY 601 GTAGCAGGCTCGCTGGTTCGGTACC 626  
Db 601 GCAGCGAGGCCCGCTGGTTCGGTACC 626

## RESULT 13

US-09-285-306-41

; Sequence 41, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 41

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-41

Query Match 91.8%; Score 574.8; DB 9; Length 626;  
Best Local Similarity 94.9%; Pred. No. 4.8e-137;  
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60  
Db 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60  
QY 61 TGGACCAAGAACACCCGCTGTCGGGCTGACCAAGCGTGTGTCGGGCTGGGCC 120  
Db 61 TGGACCAAGAACACCCGCTTTCGGGCTGACCAAGCGTGTGTCGGGCTGGGCC 120  
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 180  
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCTGGCTTGAGGTTCGCGAGCTGCACCCCTCGCACT 180  
QY 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
Db 181 ACGGCGCATGTGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240  
QY 241 TGTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGAAGGTCT 300  
Db 241 TTTGGTGTACGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGAAGGTGT 300  
QY 301 CGGACGAGTTGTTCACCGACGATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360  
Db 301 CCGAGGTGTGCTCACCGACGATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360  
QY 361 TGGTGGCGAGGCGCAACTCGCCGCTGGACGCAACCGCGCTTCAACGAGGAGAGATCC 420  
Db 361 TCGTGGCACAGGCGCAACTCGCTGTGGATCGCGACGGCGCTTCAACGAGGACAGATCC 420  
QY 421 TGGTTCGCGCAAGGCGGAGGTGGAGTTCGTTTCGTCGCGACCGAGTGCATACATGG 480  
Db 421 TGGTTCGCGCGTAAAGGTTGGCGAGTTCGTTTCGTCGCGACCGAGTGCATACATGG 480  
QY 481 ATGTCTCGCGCGCCAGATGGTGTGGTTCGGTCCGACCGCCATGATCCCGTTCTCTCGAGCAG 540  
Db 481 ACGTCTCGCGCGCCAGATGGTGTGGTTCGGTCCGACCGCCATGATCCCGTTCTCTCGAGCAG 540



```
QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db 601 GCAGCGAGGCCCGCTGGTCCGTACC 626

RESULT 14
US-09-285-306-42
; Sequence 42, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-42

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCGCGTGTGGCGCGATCAAGAGTTCTTCGGAAACCGAGCGTGCAGTTCA 60
Db 1 TCCGTCGCGTGTGGCGCGATCAAGAGTTCTTCGGAAACCGAGCGTGCAGTTCA 60
QY 61 TGGACCAAGAAACACCCGCTGTGGGCTTGACCCACCAAGCGTGCCTGGGCG 120
Db 61 TGGACCAAGAAACACCCGCTGTGGGCTTGACCCACCAAGCGTGCCTGGGCG 120
QY 121 CCGTGTGTACCCGCTGACCGCGCGCTCGAGTTCGAGTCCGCGTGCACCCCTCGCACT 180
Db 121 CCGTGTGTACCCGCTGACCGCGCGCTCGAGTTCGAGTTCGCGTGCACCCCTCGCACT 180
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
QY 241 TGTGGGTGTACCGCGGCTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTC 300
Db 241 TTTGGGTGTACCGCGGCTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTC 300
QY 301 CGGACGAGTTGTACCGACGACATCCACTACCTGACGGCGCGAAGAGGACCGCCACG 360
Db 301 CCGAGGTTGTGTACCGACGAGATCCACTACCTGACCGCGCGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCCGCGGTGGAGCGCAACCGCGCTTACCGAGGAGAGATCC 420
Db 361 TCGTGGACAGCCAACTCCGCTGTGGATGCGGCGCGCTTACCGAGGACAGATCC 420
QY 421 TGGTTTCGCGCAAGCGCGAGTGGAGTTCTGTGGCGACCGAGTGCATCATGG 480
Db 421 TGGTTCGCGCAAGCGCGAGTGGAGTTCTGTGGCGACCGAGTGCATCATGG 480
QY 481 ATGTTCTCGCGCGCAGATGTGTGGTTCGCGACCGCATGATCCGTTCTTCGAGCAG 540
Db 481 ACGTCTCGCGCGCAGATGTGTGGTTCGCGACCGCATGATCCGTTCTTCGAGCAG 540
QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
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Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db 601 GCAGCGAGGCCCGCTGGTCCGTACC 626

RESULT 15
US-09-285-306-43
; Sequence 43, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-43

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCGCGTGTGGCGCGATCAAGAGTTCTTCGGAAACCGAGCGTGCAGTTCA 60
Db 1 TCCGTCGCGTGTGGCGCGATCAAGAGTTCTTCGGAAACCGAGCGTGCAGTTCA 60
QY 61 TGGACCAAGAAACACCCGCTGTGGGCTTGACCCACCAAGCGTGCCTGGGCG 120
Db 61 TGGACCAAGAAACACCCGCTTTCCGGTGTGACCCACCAAGCGTGCCTGGGCG 120
QY 121 CCGTGTGTGTACCCGCTGACCGCGCGCTCGAGTTCGAGTTCGCGTGCACCCCTCGCACT 180
Db 121 CCGTGTGTGTACCCGCTGACCGCGCGCTCGAGTTCGAGTTCGCGTGCACCCCTCGCACT 180
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
QY 241 TGTGGGTGTACCGCGGCTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTC 300
Db 241 TTTGGGTGTACCGCGGCTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTC 300
QY 301 CGGACGAGTTGTACCGACGACATCCACTACCTGACGGCGCGAAGAGGACCGCCACG 360
Db 301 CCGAGGTTGTGTACCGACGAGATCCACTACCTGACCGCGCGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCCGCGGTGGAGCGCAACCGCGCTTACCGAGGAGAGATCC 420
Db 361 TCGTGGACAGCCAACTCCGCTGTGGATGCGGCGCGCTTACCGAGGACAGATCC 420
QY 421 TGGTTTCGCGCAAGCGCGAGTGGAGTTCTGTGGCGACCGAGTGCATCATGG 480
Db 421 TGGTTCGCGCAAGCGCGAGTGGAGTTCTGTGGCGACCGAGTGCATCATGG 480
QY 481 ATGTTCTCGCGCGCAGATGTGTGGTTCGCGACCGCATGATCCGTTCTTCGAGCAG 540
Db 481 ACGTCTCGCGCGCAGATGTGTGGTTCGCGACCGCATGATCCGTTCTTCGAGCAG 540
QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCGCAAGCGGTTCCGCTGGTGC 600
```



QY 601 GTAGGAGGCTCGCTGTCGGTACC 626  
Db 601 GCAGGAGGCCCCGCTGGTCGGTACC 626

Search completed: August 20, 2004, 01:36:34  
Job time : 363.256 secs

**This Page Blank (uspto)**

GenCore version 5.1.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 58.999 Seconds  
(without alignments)  
5888.223 Million cell updates/sec

Title: US-09-285-306-2

Perfect score: 626

Sequence: 1 tccgtccgctgctggcg... aggtccgctgctggctacc 626

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A-COMB.seq: \*  
2: /cgn2\_6/ptodata/2/ina/5B-COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A-COMB.seq: \*  
4: /cgn2\_6/ptodata/2/ina/6B-COMB.seq: \*  
5: /cgn2\_6/ptodata/2/ina/PCTUS-COMB.seq: \*  
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	480.4	76.7	706	3	US-09-797-812-24
2	480.4	76.7	4403765	3	US-09-103-840A-2
3	480.4	76.7	4411529	3	US-09-103-840A-1
4	470.6	75.2	620	2	US-08-757-653-135
5	470.6	75.2	620	2	US-08-757-653-138
6	470.6	75.2	620	4	US-08-520-946-135
7	470.6	75.2	620	4	US-08-520-946-138
8	470.6	75.2	620	4	US-09-655-378A-135
9	470.6	75.2	620	4	US-08-757-653-138
10	469	74.9	620	2	US-08-757-653-137
11	469	74.9	620	2	US-08-757-653-139
12	469	74.9	620	2	US-08-757-653-140
13	469	74.9	620	4	US-08-520-946-136
14	469	74.9	620	4	US-08-520-946-137
15	469	74.9	620	4	US-08-520-946-139
16	469	74.9	620	4	US-08-520-946-139
17	469	74.9	620	4	US-08-520-946-140
18	469	74.9	620	4	US-09-655-378A-136
19	469	74.9	620	4	US-09-655-378A-137
20	469	74.9	620	4	US-09-655-378A-139
21	469	74.9	620	4	US-09-655-378A-140
22	456.4	72.9	3447	2	US-08-313-185-57
23	456.4	72.9	3447	3	US-09-082-614A-57
24	447.2	71.4	970	1	US-08-250-030-1
25	447.2	71.4	970	5	PCT-US95-06790-1
26	363	58.0	706	3	US-08-797-812-25
27	325	51.9	4074	4	US-09-252-991A-4737

28	325	51.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	322.4	51.5	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	322.4	51.5	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	262.2	41.9	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
32	252.8	40.4	11935	4	US-09-634-238-401	Sequence 401, App
33	247.2	39.5	2964	4	US-09-540-236-1097	Sequence 1097, Ap
34	247.2	39.5	31663	4	US-09-596-002-20	Sequence 20, Appl
35	245.6	39.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
36	238.2	38.1	1830121	4	US-09-557-884-1	Sequence 1, Appli
37	238.2	38.1	1830121	4	US-09-643-990A-1	Sequence 1, Appli
38	237.8	38.0	14672	4	US-08-961-527-111	Sequence 111, App
39	237.6	38.0	432	2	US-08-313-185-59	Sequence 59, Appl
40	237.6	38.0	432	3	US-09-082-614A-59	Sequence 59, Appl
41	215.4	34.4	324	4	US-08-750-088A-36	Sequence 36, Appl
42	215.4	34.4	324	4	US-09-722-319-36	Sequence 36, Appl
43	209	33.4	15598	4	US-08-956-171E-82	Sequence 82, Appl
44	208	33.2	1230025	4	US-09-198-452A-1	Sequence 1, Appli
45	202.6	32.4	2205	4	US-09-134-000C-2197	Sequence 2197, Ap

## ALIGNMENTS

### RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Strayer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSER: Townsend and Townsend and Crew LLP

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 706 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; US-08-797-812-24

Query Match 76.7%; Score 480.4; DB 3; Length 706;  
Best Local Similarity 85.5%; Pred. No. 1.5e-96;  
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;  
Qy 1 TCCGTCCTCCGTCGCGCGCGATCAAGAGTCTTCGGAACACGACGACTGTCGAGTTCA 60  
Db 44 TCCGCGCGGTGGTCGCGCGCGATCAAGAGTCTTCGCGCACGACGACTGAGCCAAATCA 103  
Qy 61 TGGACCAAGAACACCCGCTGTCGCGCTGACCCACAGCGTCGTCGTCGCGCTGGGC 120  
Db 104 TGGACCAAGAACACCCGCTGTCGCGGTGACCCACAGCGCGACTGTCGCGCTGGGC 163  
Qy 121 CCGTGTCTCTACCCGCTGACCGCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 180  
Db 164 CCGCGCTCTCTACCGCTGACCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 223  
Qy 181 ACGCCGCGATGTCCCGATCGAGACCCCGGAGCCCGAACATCGGCTGATCGGCTCGC 240  
Db 224 ACGCCGCGATGTCCCGATCGAAACCCCTGAGGGCGCCCAATCGCTCTGATCGGCTCGC 283  
Qy 241 TGTCTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 300  
Db 284 TGTCTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAAACCGCGTACCGGAAGTGG 343  
Qy 301 CGGACGAGTGTTCACCGACGACATCCACTACTGACGCGCGCGAGAGAGACCGCCACG 360  
Db 344 TCGACGCGGTGGTTAGCGACGAGATCGTGTACTGTACCTGACCGCGCGAGAGACCGCCACG 403  
Qy 361 TGTGGCGCGAGCCAACTCGCCGTGACGCGCGCGCGTTCACGAGAGAGATCC 420  
Db 404 TGTGGCACAGGCGCAATTCGCGCGATCGATCGGACGCTCGCTTCGAGCGCGCTGC 463  
Qy 421 TGTTCGCGCAAGCGCGCGAGTGGAGTTCGTCGCGCGACGAGTGCACCTACATGG 480  
Db 464 TGTTCGCGCAAGCGCGCGAGTGGAGTTCGTCGCGCGACGAGTGCACCTACATGG 523  
Qy 481 ATGTCTCCGCGCGCAGATGTGTGCGTTCGCGACCGCGCATATCCGTTCTCGAGCACG 540  
Db 524 ACGTCTCGCCCGCGCAGATGTGTGCGTTCGCGACCGCGCATATCCCTTCCTGGAGCACG 583  
Qy 541 ACGACGCGAACCGTCCCTCATGGTCCCAATGCGAGCGCGAGCGGTTCCGCTGGTGC 600  
Db 584 ACGACGCGAACCGTCCCTCATGGGCGCAACATGCGAGCGCGAGCGGTTCCGCTGGTGC 643  
Qy 601 GTAGCGAGGCTCCGCTGCTCGGTACC 626  
Db 644 GTAGCGAGGCTCCGCTGCTGGGCACC 669

RESULT 2  
US-09-103-840A-2  
; Sequence 2, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:  
; APPLICANT: FLEISCHMAN, Robert D.  
; APPLICANT: WHITE, Owen R.  
; APPLICANT: FRASER, Claire M.  
; APPLICANT: VENTER, John C.  
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
; FILE REFERENCE: 24366-20007.00  
; CURRENT FILING DATE: 1998-06-24  
; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 4403765  
; TYPE: DNA  
; ORGANISM: Mycobacterium tuberculosis  
; FEATURE:  
; OTHER INFORMATION: CDC 1551  
; OTHER INFORMATION: "n" bases at various positions throughout the sequence  
; OTHER INFORMATION: represent a, t, c or g  
; US-09-103-840A-2

Query Match 76.7%; Score 480.4; DB 3; Length 4403765;  
Best Local Similarity 85.5%; Pred. No. 4e-96;  
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;  
Qy 1 TCCGTCCTCCGTCGCGCGCGATCAAGAGTCTTCGGAACACGACGACTGTCGAGTTCA 60  
Db 763005 TCCGCGCGGTGGTCGCGCGCGATCAAGAGTCTTCGCGCACGACGACTGAGCCAAATCA 763064  
Qy 61 TGGACCAAGAACACCCGCTGTCGCGCTGACCCACAGCGTCGTCGTCGCGCTGGGC 120  
Db 763065 TGGACCAAGAACACCCGCTGTCGCGGTGACCCACAGCGCGACTGTCGCGCTGGGC 763124  
Qy 121 CCGTGTCTCTACCCGCTGACCGCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 180  
Db 763125 CCGCGCTCTCTACCGCTGACCGCGCGCTCGAGTCCGAGCTGCACCCCTCGCACT 763184  
Qy 181 ACGCCGCGATGTCCCGATCGAGACCCCGGAGCCCGAACATCGGCTGATCGGCTCGC 240  
Db 763185 ACGCCGCGATGTCCCGATCGAAACCCCTGAGGGCGCCCAATCGCTCTGATCGGCTCGC 763244  
Qy 241 TGTCTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 300  
Db 763245 TGTCTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAAACCGCGTACCGGAAGTGG 763304  
Qy 301 CGGACGAGTGTTCACCGACGACATCCACTACTGACGCGCGCGAGAGAGACCGCCACG 360  
Db 763305 TCGACGCGGTGGTTAGCGACGAGATCGTGTACTGTACCTGACCGCGCGAGAGAGACCGCCACG 763364  
Qy 361 TGTGGCGCGAGCCAACTCGCCGTGACGCGCGCGTTCACGAGAGAGATCC 420  
Db 763365 TGTGGCACAGGCGCAATTCGCGCGATCGATCGGACGCTCGCTTCGAGCGCGCTGC 763424  
Qy 421 TGTTCGCGCAAGCGCGCGAGTGGAGTTCGTCGCGCGACGAGTGCACCTACATGG 480  
Db 763425 TGTTCGCGCAAGCGCGCGAGTGGAGTTCGTCGCGCGACGAGTGCACCTACATGG 763484  
Qy 481 ATGTCTCCGCGCGCAGATGTGTGCGTTCGCGACCGCGCATATCCGTTCTCGAGCACG 540  
Db 763485 ACGTCTCGCCCGCGCAGATGTGTGCGTTCGCGACCGCGCATATCCCTTCCTGGAGCACG 763544  
Qy 541 ACGACGCGAACCGTCCCTCATGGTCCCAATGCGAGCGCGAGCGGTTCCGCTGGTGC 600  
Db 763545 ACGACGCGAACCGTCCCTCATGGGCGCAACATGCGAGCGCGAGCGGTTCCGCTGGTGC 763604  
Qy 601 GTAGCGAGGCTCCGCTGCTCGGTACC 626  
Db 763605 GTAGCGAGGCTCCGCTGCTGGGCACC 763630

RESULT 3  
US-09-103-840A-1  
; Sequence 1, Application US/09103840A  
; Patent No. 6294328  
; GENERAL INFORMATION:  
; APPLICANT: FLEISCHMAN, Robert D.  
; APPLICANT: WHITE, Owen R.  
; APPLICANT: FRASER, Claire M.  
; APPLICANT: VENTER, John C.  
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
; FILE REFERENCE: 24366-20007.00  
; CURRENT APPLICATION NUMBER: US/09/103,840A

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; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      76.7%; Score 480.4; DB 3; Length 4411529;
Best Local Similarity 85.5%; Pred. No. 4e-96;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCTCCGTCGTGGCGGCGATCAAGAGTTCTTGGAAACACGACGCTGTGCGAGTTCA 60
Db 761045 TCCGTCCTCCGTCGTGGCGGCGATCAAGAGTTCTTGGAAACACGACGCTGTGCGAGTTCA 60
QY 61 TGGACACAGAAACACCCGCTGTCCGGGCTGACCCACAAAGGCTGCTGTGCGGCGCTGGGCG 120
Db 761105 TGGACACAGAAACACCCGCTGTCCGGGCTGACCCACAAAGGCTGCTGTGCGGCGCTGGGCG 120
QY 121 CCGGTGCTGTACCCGCTGACCCGCGCGGCTCGAGTTCGCGACGTGCAACCCCTCGCACT 180
Db 761165 CCGGTGCTGTACCCGCTGACCCGCGCGGCTCGAGTTCGCGACGTGCAACCCCTCGCACT 180
QY 181 ACGGCGCGATGTCGCGGATCGAGACCCCGGAAGGCGCGACATCGGCTGATCGGCTGCG 240
Db 761225 ACGGCGCGATGTCGCGGATCGAGACCCCGGAAGGCGCGACATCGGCTGATCGGCTGCG 240
QY 241 TGTGCTGCTACCGCGGCTCAACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGCTCT 300
Db 761285 TGTGCTGCTACCGCGGCTCAACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGCTCT 300
QY 301 CGGACGAGTTGTACCGACGACATCCACTACTGACGCGCGCGACGAGAGGACCGCCACG 360
Db 761345 TCGACGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGCCCAACTCGCCGCTGAGTTCGTTTCGCGACCGAGGTCGACTACATGG 480
Db 761465 TGGTGGCGAGCCCAACTCGCCGCTGAGTTCGTTTCGCGACCGAGGTCGACTACATGG 480
QY 481 ATGCTCTCGCGCGCGCAGATGCTGCGTGGACCGCGCATGATCCGCTTCTCGAGCAGC 540
Db 761525 ACGTCTCGCGCGCGCAGATGCTGCGTGGACCGCGCATGATCCGCTTCTCGAGCAGC 540
QY 541 ACGACGCAACCGTCCCTCATGTTGGGGGCAACATGACGCGCGCGTGGTGGTGGTCC 600
Db 761585 ACGACGCAACCGTCCCTCATGTTGGGGGCAACATGACGCGCGCGTGGTGGTGGTCC 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGCTACC 626
Db 761645 GTAGCGAGGCTCCGCTGGTTCGCTACC 626

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RESULT 4

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US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200

```

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; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; APPLICATION NUMBER: US/08/757,653
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-135

Query Match      75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCCGTCGTGGCGGCGATCAAGAGTTCTTGGAAACACGACGCTGTGCGAGTTCA 60
Db 8 TCCGTCCTCCGTCGTGGCGGCGATCAAGAGTTCTTGGAAACACGACGCTGTGCGAGTTCA 67
QY 61 TGGACACAGAAACACCCGCTGTCCGGGCTGACCCACAAAGGCTGCTGTGCGGCGCTGGGCG 120
Db 68 TGGACACAGAAACACCCGCTGTCCGGGCTGACCCACAAAGGCTGCTGTGCGGCGCTGGGCG 127
QY 121 CCGGTGCTGTACCCGCTGACCCGCGCGGCTCGAGTTCGCGACGCTGCAACCCCTCGCACT 180
Db 128 CCGGTGCTGTACCCGCTGACCCGCGCGGCTCGAGTTCGCGACGCTGCAACCCCTCGCACT 187
QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGAAGGCGCGAATCGCGCTGTGCGCTGCG 240
Db 188 ACGGCGCGATGTGCCCGATCGAGACCCCGGAAGGCGCGAATCGCGCTGTGCGCTGCG 247
QY 241 TGTGCTGTACCGCGGCTCAACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGCTCT 300
Db 248 TGTGCTGTACCGCGGCTCAACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGCTCT 307
QY 301 CGGACGAGTTGTACCGACGACATCCACTACTGACGCGCGCGAGGTCGAGGACCGCCACG 360
Db 308 TCGACGCGGCTGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGGACCGCCACG 367
QY 361 TGGTGGCGAGCCCAACTCGCCGCTGAGACCGCGAATCGCGGCTTCAACCGAGAGAGATCC 420
Db 368 TGGTGGCGAGCCCAACTCGCCGCTGAGACCGCGAATCGCGGCTTCAACCGAGAGAGATCC 427
QY 421 TGGTTCGCGCGCAAGGCGCGAGTGGAGTTCGTTGTCGCGACCGAGGTCGACTACATGG 480
Db 428 TGGTTCGCGCGCAAGGCGCGAGTGGAGTTCGTTGTCGCGACCGAGGTCGACTACATGG 487
QY 481 ATGCTCTCGCGCGCGCAGATGCTGCTCGGTCGCGACCGCGCATGATCCGCTTCTCGAGCAG 540
Db 488 ACGTCTCGCGCGCGCAGATGCTGCTCGGTCGCGACCGCGCATGATCCGCTTCTCGAGCAG 547
QY 541 ACGACGCAACCGTCCCTCATGTTGGGTGCAACATGACGCGCGCGTGGTGGTGGTCC 600
Db 548 ACGACGCAACCGTCCCTCATGTTGGGTGCAACATGACGCGCGCGTGGTGGTGGTCC 607

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QY      601 GTAGCGAGGCTCC 613
Db      608 GTAGCGAGGCCCC 620

RESULT 5
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match      75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY      1 TCCGTCCCGTGGTTCGAGGAGTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db      613 TCCGCGCGGTGGTTCGCGCGATCAAGAGTCTTCGCGACCCAGCCAGCTGAGCCAAATCA 554

QY      61 TGGACCAAGAACACCCCGCTGTCCGGCTGACCCCAAGAGCTGCTGTGCGCGCTGGCC 120
Db      553 TGGACCAAGAACACCCCGCTGTCCGGGTTCACCCCAAGCGCCGACTGTGCGCGCTGGGC 494

QY      121 CCGGTGGTCTGACCCGTGACCGCGCGCGCTCGAGGTCCGCGAGTCCACCCCTCGCACT 180
Db      493 CCGCGGTCTGTACGTGAGGTGCGCGCTGCGAGGTTCGCGAGTCCGCGACGTGACCCCTCGCACT 434

QY      181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAGGCCCGAAACATCGGCTGTATCGGCTGC 240
Db      433 ACGCCCGCATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGTATCGGCTGC 374

QY      241 TGTGGTGTACGCCCGGGTCAACCGTTCGGTTTCATCGAGACCGCTTACCGAAGTCT 300
Db      373 TGTGGTGTACGCCCGGGTCAACCGTTCGGTTTCATCGAAGACCGCTTACCGAAGTGTG 314

QY      301 CGGACGGAGTTGTACACCGACGACATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360

Db      313 TCGACGCGGTGGTTAGGACGAGATCGTGTACTCCGCGGAGGAGGACCGCCACG 254
QY      361 TGGTGGCGAGGCCAACTCGCCCGTGGACCGCAACGCGCGCTTCACCGAGGAGAGATCC 420
Db      253 TGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGCTGCTTCGTCGAGCGCGCTGC 194

QY      421 TGGTTCCCGCAAGGGCGGAGGTGGAGTTCGTGTGCGGACCGAGGTGACTACATGG 480
Db      193 TGGTCCGCGCAAGGGCGGAGGTGGAGTTCGTGTGCGCTCGTGTAGGTGGACTACATGG 134

QY      481 ATGCTCGCGCGCCAGATGCTGTGCGTCCGACCGCCATGATCCCGTTCCTCGAGCACG 540
Db      133 ACCTCTCGCCCCCGCAGATGCTGTGCGTCCGACCGCGATGATTCCTTCTCGAGCACG 74

QY      541 ACGACGCCAACCGTGCCTCATCGGTGCCAACATGACGCCCGCGGCTTCGCTGGTGC 600
Db      73 ACGACGCCAACCGTGCCTCATGGGGCAAAACATGACGCCCGCGGCTTCGCTGGTGC 14

QY      601 GTAGCGAGGCTCC 613
Db      13 GTAGCGAGGCCCC 1

RESULT 6
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match      75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY      1 TCCGTCCCGTGGTTCGCGCGGATCAAGAGTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db      613 TCCGCGCGGTGGTTCGCGCGATCAAGAGTCTTCGCGACCCAGCCAGCTGAGCCAAATCA 554

QY      61 TGGACCAAGAACACCCCGCTGTCCGGCTGACCCCAAGAGCTGCTGTGCGCGCTGGCC 120
Db      553 TGGACCAAGAACACCCCGCTGTCCGGGTTCACCCCAAGCGCCGACTGTGCGCGCTGGGC 494

QY      121 CCGGTGGTCTGACCCGTGACCGCGCGCGCTCGAGGTCCGCGAGTCCACCCCTCGCACT 180
Db      493 CCGCGGTCTGTACGTGAGGTGCGCGCTGCGAGGTTCGCGAGTCCGCGACGTGACCCCTCGCACT 434

QY      181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAGGCCCGAAACATCGGCTGTATCGGCTGC 240
Db      433 ACGCCCGCATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGTATCGGCTGC 374

QY      241 TGTGGTGTACGCCCGGGTCAACCGTTCGGTTTCATCGAGACCGCTTACCGAAGTCT 300
Db      373 TGTGGTGTACGCCCGGGTCAACCGTTCGGTTTCATCGAAGACCGCTTACCGAAGTGTG 314

QY      301 CGGACGGAGTTGTACACCGACGACATCCACTACCTGACGGCGGACGAGAGGACCGCCACG 360
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Db	8	TCGGCCGGTGGTCCGCCGCGATCAAGGAGTTCTTCGGCAACGACGAGTGTGACCAATTCA	67
Qy	61	TGGACGAGAAACAACCGCTGTGGCGCTGTACCCAAAGCGTCTGTTCGGCGCTGGGCG	120
Db	68	TGGACGAGAAACAACCGCTGTGGGTTGACCCAAGGCGCGATGTTCGGCGCTGGGCG	127
Qy	121	CCGTTGTTCTGACCCGTTGACCGCGCGCGCTCGAGTTCGGAGCTGCAACCCCTCGCACT	180
Db	128	CCGCGGTTCTGTCACTGTAGCGTGC CGGCGCTGGAGTTCGCGACGTGCAACCGTCTCGCACT	187
Qy	181	ACGGCCGATGTGCCCGATCGAGACCCCGAAGGCCGAAACATCGGCGCTGATCGGCTCGC	240
Db	188	ACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTTGATCGGCTCGC	247
Qy	241	TGTCGGTTGACCGCGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT	300
Db	248	TGTCGGTTGACCGCGGGTCAACCGTTTCGGTTTCATCGAAACGCGGTACCGCAAGTGG	307
Qy	301	CGGACGGAGTTGTCAACGACGACATCACTACCTGACGGCCGACGAGGACCGCCACG	360
Db	308	TCGACGCGGTGGTTAGCGACAGATCGTGTACTTACCGCCGACGAGGAGGACCGCCACG	367
Qy	361	TGTTGGCGCAGGCGCAACTCGCCCGTGGACGCGCAACGCGCGCTTACCGAGGAGAAGTCC	420
Db	368	TGTTGGCACAGGCCAAATTCGCCGATCGATGGACGTCGCTTCGAGCGCGCGGTGC	427
Qy	421	TGTTTCGCCGCAAGGGCGCGAGTGGAGTTTCGTTTCGGCGCACCGAGTTCGACTACATGG	480
Db	428	TGTTTCGCCGCAAGCGGGCGAGTGGAGTAGCTGCGCCCTCGTCTGAGTGGACTACATGG	487
Qy	481	ATGTTCTCGCGCGCCAGATGGTTCGGTCGCGACCGCCATGATCCGTTCTCTCGAGCAGG	540
Db	488	ACGTTCTCGCCCCGACAGTGGTTCGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGG	547
Qy	541	ACGACGCCAACCGTGCCTCATGGTGCACAATGCAAGCCAGCGGTTCCGCTGGTGGC	600
Db	548	ACGACGCCAACCGTGCCTCATGGGGGCAACATGCAAGCCAGCGGTTCCGCTGGTGGC	607
Qy	601	GTAGCGAGGTCC	613
Db	608	GTAGCGAGGCC	620

RESULT 7  
 US-08-520-946-138/c  
 ; Sequence 138, Application US/08520946  
 ; Patent No. 6372424  
 ; GENERAL INFORMATION:  
 ; APPLICANT: BROW, MARY ANN D.  
 ; APPLICANT: LYAMICHEV, VICTOR I.  
 ; APPLICANT: OLIVE, DAVID M.  
 ; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
 ; TITLE OF INVENTION: PATHOGENS  
 ; NUMBER OF SEQUENCES: 160  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: MEDLEN & CARROLL  
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200  
 ; CITY: SAN FRANCISCO  
 ; STATE: CALIFORNIA  
 ; COUNTRY: UNITED STATES OF AMERICA  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/520,946  
 ; FILING DATE:  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: CARROLL, PETER G.  
 ; REGISTRATION NUMBER: 32,837

;	REFERENCE/DOCKET NUMBER:	FORS-01756
;	TELECOMMUNICATION INFORMATION:	
;	TELEPHONE:	(415) 705-8410
;	TELEFAX:	(415) 397-8338
;	INFORMATION FOR SEQ ID NO:	138:
;	SEQUENCE CHARACTERISTICS:	
;	LENGTH:	620 base pairs
;	TYPE:	nucleic acid
;	STRANDEDNESS:	single
;	TOPOLOGY:	linear
;	MOLECULE TYPE:	DNA (genomic)
;	US-08-520-946-138	
;	Query Match	75.2%; Score 470.6; DB 4; Length 620;
;	Best Local Similarity	85.5%; Pred. No. 2.1e-94;
;	Matches 524; Conservative	0; Mismatches 89; Indels 0; Gaps 0;
Qy	1	TCCGTCGCCGTCGTGGCGCGGATCAAGAGGTTCTTCGAACACGACGCTGTCCGACTTCA 60
Db	613	TCCGCGCGGTGGTCGCGCGGATCAAGAGGTTCTTCGGCACCAGCCAGCTGAGCAATTCA 554
Qy	61	TGGACCAAGAAACACCGCTGTGCGGGCTGACCCACAAGCGTCTGTCTCGGCGCTCGGGC 120
Db	553	TGACCAAGAAACACCGCTGTGCGGGTTGACCAAAAGCGCGACTGTCTGGCGCTGGGC 494
Qy	121	CCGGTGGTCTGACCCGTGACCGCGCGGCTCTGAGGTCGCGACGCTGCACCCCTCGCACT 180
Db	493	CCGGCGGTCTGTCACTGAGCGTGCCTGGCTGAGGTCGCGACGCTGCACCCCTCGCACT 434
Qy	181	ACGCGCGCATGTCCCGCATCGACACCCGGAAGGCCGAACATCGGCTGTATCGGCTCGC 240
Db	433	ACGCGCGCATGTGTCGCGATCGAAACCCCTGAGGGGCCAACATCGGCTGTATCGGCTCGC 374
Qy	241	TGTCGTGTACGCGCGGGTCAACCCGTTTCGTTTCATCGAGCGCTTACCGGAGGTCT 300
Db	373	TGTCGTGTACGCGCGGGTCAACCCGTTTCGTTTCATCGAGGTACCGGAGGTGG 314
Qy	301	CGACGCGAGTTGTACCGACGACATCCACTACTCTGACGCGCCGACGAAGAGGACCGCACG 360
Db	313	TCAACGCGGTGTTAGCGACGAGATCGTACTGACCGCGACGAGAGACCGCACG 254
Qy	361	TGTTGGCGAGGCCAATCTGCCGTTGGACGCCAACCGCGCTTTCACCGAGGAGAATCC 420
Db	253	TGTTGGCACAGGCCAATTCGCCGATCGATCGCGACCGGTGCTTCGTCGACGCGCGGTGC 194
Qy	421	TGTTTCGCGCAAGGCGGCGAGGTGAGTTCGTTTCGCGGACCGGAGTCTGAGTCTCATCG 480
Db	193	TGTTTCGCGCAAGGCGGCGAGGTGAGTTCGTTTCGCGGACCGGAGTCTGAGTCTCATCG 434
Qy	481	ATGTTCTCGCGCGCCAGATGGTGTTCGGTTCGCGACCGCCCATGATCCCGTTCCTCGACAG 540
Db	133	ACGTTCTCGCGCGCCAGATGGTGTTCGGTTCGCGACCGCCGATGATCCCTTCCTGGAGCA 74
Qy	541	ACGACGCCAACCGTGCCTCTATGGGTGCCAAATGACAGCGCCAGGCGGTTCGCTGGTGC 600
Db	73	ACGACGCCAACCGTGCCTCATGGGGCAAATGACAGCGCCAGGCGGTGCGCTGGTCC 14
Qy	601	GTAGCGAGGCTCC 613
Db	13	GTAGCGAGGCCCC 1
;	RESULT 8	
;	US-09-655-378A-135	
;	Sequence 135, Application	US/09655378A
;	Patent No.	6673616
;	GENERAL INFORMATION:	
;	APPLICANT:	BROW, MARY ANN D.
;		LYAMICHEV, VICTOR I.
;		OLIVE, DAVID M.
;	TITLE OF INVENTION:	RAPID DETECTION AND IDENTIFICATION OF
;		PATHOGENS
;	NUMBER OF SEQUENCES:	165

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;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655.378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
;
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
;
US-09-655-378A-135

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGCGCGCGATCAAGGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
Db 8 TCCGGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCAACCCAGCAGCTGAGCCAAATTCA 67
Qy 61 TGGACCAAGAACCAACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTCGCGCTGGGCC 120
Db 68 TGGACCAAGAACCAACCCGCTGTCGGGCTTGACCCCAAGCGCTGCGCGCTGGGCC 127
Qy 121 CCGTGTGTCGACCGGTGACCGCGCGCTGCGAGTTCGGGAGTCCGGAGCTGACCCCTCGCACT 180
Db 128 CCGCGGTGTCGACGTGAGCGTGCCTGGGCTGGAGGTCCGGAGCTGACCCCTCGCACT 187
Qy 181 ACGGCGCATGTCGCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
Db 188 ACGGCGCATGTCGCCGATCGAACCCTGAGGGGCCCAACATCGTCTGATCGGCTCGC 247
Qy 241 TGTCCGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACCGCTTACCGGAAGTCT 300
Db 248 TGTCCGTGTACCGCGGGTCAACCGTTTCGTTTCATCGAGACCGCTTACCGGAAGTCT 307
Qy 301 CGGACGAGTTGTACCGACACATCCACTACCTGACGGCCGACGAGAGACCGCCACG 360
Db 308 TCGACGCGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGAGACCGCCACG 367
Qy 361 TGGTGGCGCAGGCAACCTCGCGCTGGACGCAACCGCGCTTACCGAGGAGAGATCC 420
Db 368 TGGTGGCACAGGCCAATTCGCGATCGATCGGACGGTTCGTCGACGCGCGGTGC 427
Qy 421 TGGTTCGCGCAAGGCGCGGAGTGTGTTGTCGTCGCGGACCGAGTGCATACATGG 480
Db 428 TGGTTCGCGCAAGGCGCGGAGTGTGTTGTCGTCGCGGACCGAGTGCATACATGG 487
Qy 481 ATGTCTCGCGCGCAGATGTGTGTCGTCGCGACCGGCATGATCCCGTTCTCGAGACG 540
Db 488 ACGTCTCGCGCGCAGATGTGTGTCGTCGCGACCGGCATGATCCCGTTCTCGAGACG 547

;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655.378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
;
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
;
US-09-655-378A-138

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGCGCGCGATCAAGGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
Db 613 TCCGGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCAACCCAGCAGCTGAGCCAAATTCA 554
Qy 61 TGGACCAAGAACCAACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTCGCGCTGGGCC 120
Db 553 TGGACCAAGAACCAACCCGCTGTCGGGCTTGACCCCAAGCGCTGCGCGCTGGGCC 494
Qy 121 CCGTGTGTCGACCGGTGACCGCGCGCTGCGAGTTCGGGAGTCCGGAGCTGACCCCTCGCACT 180
Db 493 CCGCGGTGTCGACGTGAGCGTCCGGGCTGGAGGTCCGGAGCTGACCCCTCGCACT 434
Qy 181 ACGGCGCATGTCGCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
Db 433 ACGGCGCATGTCGCCGATCGAACCCTGAGGGGCCCAACATCGGCTGATCGGCTCGC 374
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; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40, 027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

Query Match          74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTGGCGCGATCAAGGAGTTCTTCGGAAACCAAGCCAGCTGTCGAGTTCA 60
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 8 TCCGCGCGGTGGTCGCGCGATCAAGGAGTTCTTCGGCAACCAAGCCAGCTGAGCCAAATCA 67
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 61 TGGACCAAGAAACACCCGCTGTCGGGCTGAGCCCAAGCGTCGTCGCGGCTGGGCC 120
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 68 TGGACCAAGAAACACCCGCTGTCGGGCTGAGCCCAAGCGCGACTGTTGCGCTGGGGC 127
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 121 CCGGTGGTCTCACCCTGACCGCGCGCGCTCGAGGTCGGGAGTGTCACCCCTCGCACT 180
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 128 CCGCGGTCTCTCAGTGAGGTGTCGGGCTGAGGTCGGGAGTCGCGACCGCTCGCACT 187
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 181 ACGGCCGCGATGTGCCCGATCGAGACCCCGGAGGCCGAAACATCGGCTGATGCGCTGC 240
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 188 ACGGCCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTGC 247
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 241 TGTGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 248 TGTGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAAACGCGCTACCGCAAGGTGG 307
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 301 CGGACGGAGTTGTACCCAGACATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 308 TCGACGGCGTGGTAGCGACGAGATCGTGACTGACCGCCGACGAGAGGACCGCCACG 367
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 361 TGGTGGCCAGGCCAACTCGCCCGTGGAGCCGCAAGCGCGCTTCAACGAGAGAGATCC 420
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 368 TGGTGGCCAGGCCAAATTCGCCGATCGATCGGACGGTTCGCTTCGAGCGCGCGCTGC 427
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 421 TGGTTCGCGCAAGGCGGAGGTGGAGTTGCTGTCGCGGACCGAGGTGCACTACATGG 480
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 428 TGGTTCGCGCAAGGCGGAGGTGGAGTTGCTGTCGCGGACCGAGGTGCACTACATGG 487
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 481 ATGCTCTCCCGCGCCAGATGTTGTCGTCGGACCGCCCATGATCCCGTTCTCTCGAGACG 540
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 488 ACGTCTCCCGCGCCAGATGTTGTCGTCGGACCGCCCATGATTCCTTCCTGAGACG 547
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 541 ACGAGCCAAACCGTGCCTCATGGTGCACATGACGAGCGCGCGGTTCGCTGGTGC 600
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 548 ACGAGCCAAACCGTGCCTCATGGGCGCAACATGACGCGCGCGGTTCGCTGGTGC 607
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 601 GTAGCGAGGCTCC 613
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 608 GTAGCGAGGCCCC 620
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
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## RESULT 12

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US-08-757-653-139/c
; Sequence 139, Application US/08757653
; Patent No. 5843689
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
```

```
; APPLICANT: Lyamichev, Victor I.
; APLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40, 027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-139
```

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Query Match          74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTGGCGCGATCAAGGAGTTCTTCGGAAACCAAGCCAGCTGTCGAGTTCA 60
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 61 TGGACCAAGAAACACCCGCTGTCGGGCTGAGCCCAAGCGTCGTCGCGCTGGGCC 120
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 553 TGGACCAAGAAACACCCGCTGTCGGGCTGAGCTTCAAGCGCCGACTGCGGCGCTGGGGC 494
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 121 CCGGTGGTCTCACCCTGACCGCGCGCGCTCGAGGTCGGGAGTCGTCACCCCTCGCACT 180
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 493 CCGCGGTCTCTCAGTGAGCGTGCAGGCTGGAGTCCGCGACGTGACCCGCTCGCACT 434
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 181 ACGGCCGCGATGTGCCCGATCGAGACCCCGGAGGCCGAAACATCGGCTGATGCGCTGC 240
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 433 ACGGCCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGATGCGCTGC 374
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 241 TGTGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 373 TGTGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAAACGCGCTACCGAAGTGG 314
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 301 CGGACGGAGTTGTACCCAGACATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 313 TCGACGGCGTGGTTAGCGACGAGATCGTGTAACCTGACCGCCGACGAGGAGGACCGCCACG 254
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 361 TGGTGGCCAGGCCAACTCGCCCGTGGAGCCCAAGCGCGCTTCAACCGGAGGAGATGCC 420
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 253 TGGTGGCCAGGCCAAATTCGCCGATCGATCGGACGGTTCGCTTCGAGCGCGCGCTGC 194
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 421 TGGTTCGCGCAAGGCGGCGGAGGTGGAGTTGCTGTCGCGGACCGAGGTGCACTACATGG 480
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 193 TGGTTCGCGCAAGGCGGCGGAGGTGGAGTAGCTGCTCCCTCGTCTGAGGTGGACTACATGG 134
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
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QY 481 ATGTCCTCGCCGCGCAGATGGTGTGGTTCGCGACGCCCATGATCCGGTTCCTCGAGCAG 540  
Db 133 ACGTCTCGCCCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCTTCCTGGAGCAG 74  
QY 541 ACGAGCCAAACCGTGCCTTCATGGTGCCAAATGACAGCGCCAGGGGTTCCGCTGGTGC 600  
Db 73 ACGAGCCAAACCGTGCCTTCATGGTGCCAAATGACAGCGCCAGGGGTTCCGCTGGTGC 14  
QY 601 GTAGCGAGGCTCC 613  
Db 13 GTAGCGAGGCCCC 1

RESULT 13  
US-08-757-653-140/c  
; Sequence 140, Application US/08757653  
; Patent No. 5843669  
; GENERAL INFORMATION:  
; APPLICANT: Kaiser, Michael W.  
; APPLICANT: Lyamichev, Victor I.  
; APPLICANT: Lyamichev, Natasha  
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using  
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases  
; NUMBER OF SEQUENCES: 190  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medlen & Carroll, LLP  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States Of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/757,653  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: FORS-02565  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 140:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
US-08-757-653-140

Query Match 74.9%; Score 469; DB 2; Length 620;  
Best Local Similarity 85.3%; Pred. No. 4.7e-94;  
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGGATCAAGGAGTTCTTCGACACGACGAGTGTGCGAGTTCA 60  
Db 613 TCCGTCCTCGTGGCGGATCAAGGAGTTCTTCGACACGACGAGTGTGCGAGTTCA 554  
QY 61 TGGACAGAACACCGTGTGCGGGCTGACCCAAAGCGTGTGTCGGCGCTGGGGC 120  
Db 553 TGGACAGAACACCGTGTGCGGGTTGACCCAAAGCGTGTGTCGGCGCTGGGGC 494  
QY 121 CCGGTGGTCTGACCGTGACCGCGCGGCTCGAGTCCGACGTGACCCCTCGCACT 180  
Db 493 CCGGGGTCTGTACGTGAGCGTGGCGCTGGAGTCCGACGTGACCCCTCGCACT 434  
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGAGGCGCCGACATCGCGCTGATCGGCTCGC 240

Db 433 ACGCGCGATGTGCCGATCGAAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTCGC 374  
QY 241 TGTGGTGTACCGCGGGGTCAACCCGTTTCGTTTTCATCGAGACGCTTACCGGAAAGTCT 300  
Db 373 TGTGGTGTACCGCGGGGTCAACCCGTTTCGTTTTCATCGAAACGCGGTACCGCAAGTGG 314  
QY 301 CGAGCGAGTGTGTACCGAGCATCCACTACTGACGGCCGACGAGAGGACCGCCAGC 360  
Db 313 TCGACGGCGTGTGTAGCGACGAGATCGTGTACCTGACCCCGACGAGGAGACCGCCAGC 254  
QY 361 TGTGGCGCAGGCGCAACTCGCCGTTGGAGCCCAAGCGCGCTTCCCGAGGAGAGATCC 420  
Db 253 TGTGGCACAGGCGCAATTGCGCGATCGATCGCGAGCGTCTGTCGAGCGCGCGGTGC 194  
QY 421 TGTTCGCGCAAGGGCGGCGAGGTGGAGTTCTGTGTGCGCGACCGAGGTCTGACTATGG 480  
Db 193 TGTTCGCGCAAGGGCGGCGAGGTGGAGTACGTCCCTCGTCTGAGGTGGACTACATGG 134  
QY 481 ATGTCCTCGCCGCGCCAGATGGTGTGGTTCGCGACCGCCCATGATCCGTTCTCGAGCAGC 540  
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QY 541 ACGAGCCAAACCGTGCCTTCATGGTGCCAAATGACAGCGCCAGGGGTTCCGCTGGTGC 600  
Db 73 ACGAGCCAAACCGTGCCTTCATGGTGCCAAATGACAGCGCCAGGGGTTCCGCTGGTGC 14  
QY 601 GTAGCGAGGCTCC 613  
Db 13 GTAGCGAGGCCCC 1

RESULT 14  
US-08-520-946-136  
; Sequence 136, Application US/08520946  
; Patent No. 6372424  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; APPLICANT: LYAMICHEV, VICTOR I.  
; APPLICANT: OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; TITLE OF INVENTION: PATHOGENS  
; NUMBER OF SEQUENCES: 160  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/520,946  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 136:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)

US-08-520-946-136

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Query Match          74.9%; Score 469; DB 4; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCGTCCCGTCGTGGCGGCGATCAAGGAGTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db 8 TCGCGCCGGTGTTCGCGCGATCAAGGAGTCTTCGGAACCCAGCCAGCTGAGCCAAITCA 67

Qy 61 TGGACCAAGAACAAACCCCGCTGTCCGGCCCTGACCCACAAGCGTCGTCGTCCGGCGCTGGGCC 120
Db 68 TGGACCAAGAACAAACCCCGCTGTCCGGGTTGACCTACAGCCGCGACTGCGGCGCTGGGCC 127

Qy 121 CCGTGTGTCTGACCCGTGACCGCGCGCGCTCGAGGTCGAGGTCGCGACGTGACCCCTCGCACT 180
Db 128 CCGCGGTCTGTACGTGACGCGTCCGGGTCGAGGTCGCGACGTGACCCCTCGCACT 187

Qy 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240
Db 188 ACGCCCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTGC 247

Qy 241 TGTGGTGTACCGCGGGTCAACCCCGTTCGAGTTCGAGTTCATCGAGACCCCTTACCGAGGTTCT 300
Db 248 TGTGGTGTACCGCGGGTCAACCCCGTTCGAGTTCATCGAAACCCCTTACCGAGGTTCT 307

Qy 301 CGGACGAGTTGTACCGACGACATCCACTACCTGACGCGCGCGAGAGACCGCCACG 360
Db 308 TCGACGCGGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGAGAGACCGCCACG 367

Qy 361 TGGTGGCGAGGCAACTCGCCGTGACGCGCAACCGCGCTTCCACGAGGAGAGATCC 420
Db 368 TGGTGGCACAGGCCAATTCGCCGATCGATGGGACGCTCGCTTCGTGACCGCGGCTGC 427

Qy 421 TGGTTCGCCGCAAGGGCGGCGAGTGGAGTTGCTGTCGCGGACCGAGGTCGACTACATGG 480
Db 428 TGGTTCGCCGCAAGGGCGGCGAGTGGAGTGGAGTACGTCCTCGTCTGAGTGGACTACATGG 487

Qy 481 ATGTCTCGCGCGCAGATGGTGTGTCGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 488 ACGTCTCGCGCGCAGATGGTGTGTCGCGGACCGCCATGATCCCGTTCTCGAGCACG 547

Qy 541 ACGACGCCAACCGTGCCTCATGGGTGCCAATCGACGCGCGAGCGGTTCCGCTGGTGC 600
Db 548 ACGACGCCAACCGTGCCTCATGGGGCCAAACATGACGCGCGAGCGGTCGCGTGGTCC 607

Qy 601 GTAGCGAGGTCC 613
Db 608 GTAGCGAGGCCCC 620
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## RESULT 15

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US-08-520-946-137
; Sequence 137, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
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SOFTWARE: PatentIn Release #1.0, Version #1.25

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CURRENT APPLICATION DATA: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-137
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Query Match          74.9%; Score 469; DB 4; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCGTCCCGTCGTGGCGGCGATCAAGGAGTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db 8 TCGCGCCGGTGTTCGCGCGATCAAGGAGTCTTCGGAACCCAGCCAGCTGAGCCAAITCA 67

Qy 61 TGGACCAAGAACAAACCCCGCTGTCCGGCCCTGACCCACAAGCGTCGTCGTCCGGCGCTGGGCC 120
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Qy 121 CCGTGTGTCTGACCCGTGACCGCGCGCGCTCGAGGTCGCGACGTGACCCCTCGCACT 180
Db 128 CCGCGGTCTGTACGTGACGCGTCCGGGTCGAGGTCGCGACGTGACCCCTCGCACT 187

Qy 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTGC 240
Db 188 ACGCCCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTGC 247

Qy 241 TGTGGTGTACCGCGGGTCAACCCCGTTCGAGTTCGAGTTCATCGAGACCCCTTACCGAGGTTCT 300
Db 248 TGTGGTGTACCGCGGGTCAACCCCGTTCGAGTTCATCGAAACCCCTTACCGAGGTTCT 307

Qy 301 CGGACGAGTTGTACCGACGACATCCACTACCTGACGCGCGCGAGAGACCGCCACG 360
Db 308 TCGACGCGGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGAGAGACCGCCACG 367

Qy 361 TGGTGGCGAGGCAACTCGCCGTGACGCGCAACCGCGCTTCCACGAGGAGAGATCC 420
Db 368 TGGTGGCACAGGCCAATTCGCCGATCGATGGGACGCTCGCTTCGTGACCGCGGCTGC 427

Qy 421 TGGTTCGCCGCAAGGGCGGCGAGTGGAGTTGCTGTCGCGGACCGAGGTCGACTACATGG 480
Db 428 TGGTTCGCCGCAAGGGCGGCGAGTGGAGTGGAGTACGTCCTCGTCTGAGTGGACTACATGG 487

Qy 481 ATGTCTCGCGCGCAGATGGTGTGTCGCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 488 ACGTCTCGCGCGCAGATGGTGTGTCGCGGACCGCCATGATCCCGTTCTCGAGCACG 547

Qy 541 ACGACGCCAACCGTGCCTCATGGGTGCCAATCGACGCGCGAGCGGTTCCGCTGGTGC 600
Db 548 ACGACGCCAACCGTGCCTCATGGGGCCAAACATGACGCGCGAGCGGTCGCGTGGTCC 607

Qy 601 GTAGCGAGGTCC 613
Db 608 GTAGCGAGGCCCC 620
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Search completed: August 19, 2004, 14:44:40  
Job time : 71.999 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds  
(without alignments)  
8488.468 Million cell updates/sec

Title: US-09-285-306-1

Perfect score: 705

Sequence: 1 cccagcagtgaggcagtc.....ggcgatcgagcggcgagct 705

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Lasting first 45 summaries

Database : Published Applications NA:\*

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- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
- 4: /cgn2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq:\*
- 5: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*
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- 7: /cgn2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq:\*
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- 9: /cgn2\_6/ptodata/1/pubpna/US09A\_PUBCOMB.seq:\*
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- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq:\*
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- 13: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq:\*
- 14: /cgn2\_6/ptodata/1/pubpna/US10A\_PUBCOMB.seq:\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10C\_PUBCOMB.seq:\*
- 17: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*
- 18: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq:\*
- 19: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	705	100.0	705	9	US-09-285-306-1
2	705	100.0	705	9	US-09-285-306-1
3	697.4	98.9	3288	13	US-10-282-122A-26193
4	697.4	98.9	3519	9	US-09-712-363-30
5	697.4	98.9	3519	13	US-10-282-122A-28230
6	687	97.4	687	9	US-09-285-306-29
7	620.2	88.0	705	9	US-09-285-306-181
8	620	87.9	620	10	US-09-940-925A-135
9	620	87.9	620	10	US-09-940-925A-138
10	620	87.9	620	10	US-09-941-193A-135
11	620	87.9	620	10	US-09-941-193A-138
12	618.4	87.7	620	10	US-09-940-925A-136
13	618.4	87.7	620	10	US-09-940-925A-137
14	618.4	87.7	620	10	US-09-940-925A-139

C	15	618.4	87.7	620	10	US-09-940-925A-140	Sequence 140, App
	16	618.4	87.7	620	10	US-09-941-193A-136	Sequence 136, App
	17	618.4	87.7	620	10	US-09-941-193A-137	Sequence 137, App
	18	618.4	87.7	620	10	US-09-941-193A-139	Sequence 139, App
C	19	618.4	87.7	620	10	US-09-941-193A-140	Sequence 140, App
	20	613.8	87.1	705	9	US-09-285-306-87	Sequence 87, Appl
	21	613.8	87.1	705	9	US-09-285-306-88	Sequence 88, Appl
	22	613.8	87.1	705	9	US-09-285-306-89	Sequence 89, Appl
	23	613.8	87.1	705	9	US-09-285-306-90	Sequence 90, Appl
	24	613.8	87.1	705	9	US-09-285-306-91	Sequence 91, Appl
	25	613.8	87.1	705	9	US-09-285-306-92	Sequence 92, Appl
	26	613.8	87.1	705	9	US-09-285-306-96	Sequence 96, Appl
	27	612.2	86.8	705	9	US-09-285-306-84	Sequence 84, Appl
	28	612.2	86.8	705	9	US-09-285-306-86	Sequence 86, Appl
	29	612.2	86.8	705	9	US-09-285-306-93	Sequence 93, Appl
	30	612.2	86.8	705	9	US-09-285-306-94	Sequence 94, Appl
	31	612.2	86.8	705	9	US-09-285-306-95	Sequence 95, Appl
	32	610.6	86.6	705	9	US-09-285-306-3	Sequence 3, Appli
	33	610.6	86.6	705	9	US-09-285-306-4	Sequence 4, Appli
	34	610.6	86.6	705	9	US-09-285-306-5	Sequence 5, Appli
	35	610.6	86.6	705	9	US-09-285-306-6	Sequence 6, Appli
	36	610.6	86.6	705	9	US-09-285-306-7	Sequence 7, Appli
	37	610.6	86.6	705	9	US-09-285-306-8	Sequence 8, Appli
	38	610.6	86.6	705	9	US-09-285-306-9	Sequence 9, Appli
	39	610.6	86.6	705	9	US-09-285-306-12	Sequence 12, Appl
	40	610.6	86.6	705	9	US-09-285-306-13	Sequence 13, Appl
	41	610.6	86.6	705	9	US-09-285-306-14	Sequence 14, Appl
	42	610.6	86.6	705	9	US-09-285-306-16	Sequence 16, Appl
	43	610.6	86.6	705	9	US-09-285-306-24	Sequence 24, Appl
	44	610.6	86.6	705	9	US-09-285-306-85	Sequence 85, Appl
	45	609	86.4	705	9	US-09-285-306-17	Sequence 17, Appl

## ALIGNMENTS

RESULT 1  
US-09-285-306-1  
; Sequence 1, Application US/09285306A  
; Publication No. US20020187467A1  
; GENERAL INFORMATION:  
; APPLICANT: Gingers, Thomas  
; APPLICANT: Drenkow, Jorg  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
; FILE REFERENCE: 018547-018570US  
; CURRENT APPLICATION NUMBER: US/09/285,306A  
; CURRENT FILING DATE: 1999-04-02  
; EARLIER APPLICATION NUMBER: US 60/080,616  
; EARLIER FILING DATE: 1998-04-03  
; NUMBER OF SEQ ID NOS: 181  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 1  
; LENGTH: 705  
; TYPE: DNA  
; ORGANISM: Mycobacterium tuberculosis  
US-09-285-306-1

Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 4.9e-170;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCCAGGAGTGGAGCGATCACCGCAGAGCTTGATCAACATCCGCGCGGTGGTCGCG 60		
Db	1	CCCAGGAGTGGAGCGATCACCGCAGAGCTTGATCAACATCCGCGCGGTGGTCGCG 60		
QY	61	CGATCAAGAGTCTTCGGCCACCGCAGCTGAGCCAATTCATGACCAACACCGCG 120		
Db	61	CGATCAAGAGTCTTCGGCCACCGCAGCTGAGCCAATTCATGACCAACACCGCG 120		
QY	121	TGTCGGGTTTCCACCAAGCGCGAGCTGTCGGCGCTGGGCGCGGTCTGTACGTTG 180		
Db	121	TGTCGGGTTTCCACCAAGCGCGAGCTGTCGGCGCTGGGCGCGGTCTGTACGTTG 180		



/	PRIOR APPLICATION NUMBER:	60/253,625
/	PRIOR FILING DATE:	2000-11-27
/	PRIOR APPLICATION NUMBER:	60/257,931
/	PRIOR FILING DATE:	2000-12-22
/	PRIOR APPLICATION NUMBER:	60/267,636
/	PRIOR FILING DATE:	2001-02-09
/	PRIOR APPLICATION NUMBER:	60/269,308
/	PRIOR FILING DATE:	2001-02-16
/	Remaining Prior Application data removed - See File Wrapper or PALM.	
/	NUMBER OF SEQ ID NOS:	78614
/	SOFTWARE:	Patentin version 3.1
/	SEQ ID NO	26193
/	LENGTH:	3288
/	TYPE:	DNA
/	ORGANISM:	Mycobacterium bovis
/	US-10-282-122A-26193	
Query Match                      98.9%;    Score 697.4;    DB 13;    Length 3288;		
Best Local Similarity         99.9%;    Pred. No. 4.1e-168;		
Matches    698;    Conservative    0;    Mismatches    1;    Indels    0;    Gaps    0;		
QY	1	CCGAGGACGTGGAGCGCATCACCCGACAGCGTTGATCAACATCCGCCGCTGGTTCGCCG 60
Db	971	CCGAGGACGTGGAGCGCATCACCCGACAGCGTTGATCAACATCCGCCGCTGGTTCGCCG 1030
QY	61	CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAAATTATGSGACCAACAACCCCG 120
Db	1031	CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAAATTCATGSACCAACAACCCCG 1090
QY	121	TGTCGGGTTGACCCACAAGCGCCGACTGTGCGCGCTGGGCCCGCGGTCTGTCAAGTG 180
Db	1091	TGTCGGGTTGACCCACAAGCGCCGACTGTGCGCGCTGGGCCCGCGGTCTGTCAAGTG 1150
QY	181	AGCGTGC CGCGCTGGAGTCCGCGACTGCACCGCTGCACCTAGCGCCGATGTCGCCGA 240
Db	1151	AGCGTGC CGCGCTGGAGTCCGCGACTGCACCGCTGCACCTAGCGCCGATGTCGCCGA 1210
QY	241	TCGAACCCCTGAGGGCCCCAACATCGGTTCTGATCGGCTCGCTGTGCGGTACGCGCGG 300
Db	1211	TCGAACCCCTGAGGGCCCCAACATCGGTTCTGATCGGCTCGCTGTGCGGTACGCGCGG 1270
QY	301	TCAACCGTTTCGGGTTTCATCGAACGCCGTACCGCAGGTGGTCGACGGCGTGGTAGCG 360
Db	1271	TCAAACCGTTTCGGGTTTCATCGAACGCCGTACCGCAGGTGGTCGACGGCGTGGTAGCG 1330
QY	361	ACGAGATCGTGTACCTGTAACGCCGACGAGGAGCACGCCACGTCGTGGCACAGGCCAAAT 420
Db	1331	ACGAGATCGTGTACCTGTAACGCCGACGAGGAGCACGCCACGTCGTGGCACAGGCCAAAT 1390
QY	421	CGCCGATCGATCGGACGTCGCTTCGTTCAGCGCGCGCTGCTGGTTCGCCCGCAAGCGG 480
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QY	481	GCGAGTGGAGTACGTGCCCTTCGCTCTGAGTGGACTACATGAGCACTCTCCGCCCGCAGA 540
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QY	541	TGCTGTCTGGCCACCGGATGATTCCTTCTTGAGCA CGACGCAACCGTGCCC 600
Db	1511	TGCTGTCTGGCCACCGGATGATTCCTTCTTGAGCA CGACGCAACCGTGCCC 1570
QY	601	TCAATGGGGCAACATGACGCGCAGCGCTGCCGTGGTCCGTACGAGGCCCGCTCG 660
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RESULT 4  
US-09-712-363-30  
; Sequence 30, Application US/09712363

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; Patent No. US20020164588A1
;
; GENERAL INFORMATION:
;
; APPLICANT: Eisenberg, David
; APPLICANT: Rotstein, Sergio M.
; APPLICANT: Marcotte, Edward M.
;
; TITLE OF INVENTION: DETERMINING THE FUNCTIONS AND
; INTERACTIONS OF PROTEINS BY COMPARATIVE ANALYSIS
;
; FILE REFERENCE: 07419-032001
;
; CURRENT APPLICATION NUMBER: US/09/712,363
;
; CURRENT FILING DATE: 2000-11-13
;
; PRIOR APPLICATION NUMBER: PCT/US00/02246
;
; PRIOR FILING DATE: 2000-01-28
;
; PRIOR APPLICATION NUMBER: 60/179,531
;
; PRIOR FILING DATE: 2000-02-01
;
; PRIOR APPLICATION NUMBER: 60/117,844
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; PRIOR FILING DATE: 1999-01-29
;
; PRIOR APPLICATION NUMBER: 60/118,206,
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; PRIOR FILING DATE: 1999-02-01
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; PRIOR APPLICATION NUMBER: 60/126,593
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; PRIOR FILING DATE: 1999-03-26
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; PRIOR APPLICATION NUMBER: 60/134,093
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; PRIOR FILING DATE: 1999-05-14
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; PRIOR APPLICATION NUMBER: 60/134,092
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; PRIOR FILING DATE: 1999-05-14
;
; PRIOR APPLICATION NUMBER: 60/165,124
;
; PRIOR FILING DATE: 1999-11-12
;
; PRIOR APPLICATION NUMBER: 60/165,086
;
; PRIOR FILING DATE: 1999-11-12
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; NUMBER OF SEQ ID NOS: 292
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; SOFTWARE: Fast-Seq for Windows Version 4.0
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; SEQ ID NO 30
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; LENGTH: 3519
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; TYPE: DNA
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; ORGANISM: Mycobacterium tuberculosis
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; US-09-712-363-30

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Best Local Similarity	99.9%	Pred.	No. 4.1e-168				
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Gaps	0						
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QY	61	CGATCAAGAGGTTCTTTGGSCACACGACGAGCTGAGCCAAATTCATGGACACGAAACAACCCCG	120				
Db	1259	CGATCAAGAGGTTCTTTGGSCACACGACGAGCTGAGCCAAATTCATGGACACGAAACAACCCCG	1318				
QY	121	TGTCGGGGTTGACCCACAAAGCGCGACTGTGGCGCTGGGGGCCCGCGTCTGTCACTG	180				
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QY	301	TCAACCCGCTCGGGTTATCFGAACCGCGTACCGCAAGGTGTCGACGGCGTGGTTAGCG	360				
Db	1499	TCAACCCGCTCGGGTTATCFGAACCGCGTACCGCAAGGTGTCGACGGCGTGGTTAGCG	1558				
QY	361	ACGAGATCGTGTACCTGACCGCGGACGAGGAGGACCGGCACTGGTGGCACAGGCCAATT	420				
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QY	421	CGCCGATCGATCGGACGCTGCTTCGTCGACCGCGGGTGTGTCGCCCGCAAGGCGG	480				
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QY	481	GGAGGTGGAGTACGCTGCGCTCTGAGGTGGAATCAATGAGACTCTCGGCCGCCACA	540				

Db 1679 GCAGGTGGAGTACGTCCTCTCTAGTGGACTATATGGAGCTCTCCGCCGCCGAGA 1738  
 Qy 541 TGTGTGCGTGGCCACCGCGATGATTCCTTCTCTGGAGCAGCAGCGCCAAACCGTGC 600  
 Db 1739 TGTGTGCGTGGCCACCGCGATGATTCCTTCTCTGGAGCAGCAGCGCCAAACCGTGC 1798  
 Qy 601 TCATGGGGGAAACATGACGCGCAGCGCGTGCCTGCTGGTCCGTAGCAGGCGCCCGTGG 660  
 Db 1799 TCATGGGGGAAACATGACGCGCAGCGCGTGCCTGCTGGTCCGTAGCAGGCGCCCGTGG 1858  
 Qy 661 TGGCACCGGAGTGGAGCTGCGCGCGCGATCGACGCGG 699  
 Db 1859 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGG 1897

RESULT 5  
 US-10-282-122A-28230  
 ; Sequence 28230, Application US/10282122A  
 ; Publication No. US20040029129A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Wang, Liangsu  
 ; APPLICANT: Zamudio, Carlos  
 ; APPLICANT: Malone, Cheryl  
 ; APPLICANT: Haselbeck, Robert  
 ; APPLICANT: Ohlsen, Kari  
 ; APPLICANT: Zyskind, Judith  
 ; APPLICANT: Wall, Daniel  
 ; APPLICANT: Trawick, John  
 ; APPLICANT: Carr, Grant  
 ; APPLICANT: Yamamoto, Robert  
 ; APPLICANT: Forsyth, R.  
 ; APPLICANT: Xu, H.  
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
 ; FILE REFERENCE: ELITRA.034A  
 ; CURRENT APPLICATION NUMBER: US/10/282,122A  
 ; CURRENT FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: 60/191,078  
 ; PRIOR FILING DATE: 2000-03-21  
 ; PRIOR APPLICATION NUMBER: 60/206,848  
 ; PRIOR FILING DATE: 2000-05-23  
 ; PRIOR APPLICATION NUMBER: 60/207,727  
 ; PRIOR FILING DATE: 2000-05-26  
 ; PRIOR APPLICATION NUMBER: 60/230,335  
 ; PRIOR FILING DATE: 2000-09-06  
 ; PRIOR APPLICATION NUMBER: 60/230,347  
 ; PRIOR FILING DATE: 2000-09-09  
 ; PRIOR APPLICATION NUMBER: 60/242,578  
 ; PRIOR FILING DATE: 2000-10-23  
 ; PRIOR APPLICATION NUMBER: 60/253,625  
 ; PRIOR FILING DATE: 2000-11-27  
 ; PRIOR APPLICATION NUMBER: 60/257,931  
 ; PRIOR FILING DATE: 2000-12-22  
 ; PRIOR APPLICATION NUMBER: 60/267,636  
 ; PRIOR FILING DATE: 2001-02-09  
 ; PRIOR APPLICATION NUMBER: 60/269,308  
 ; PRIOR FILING DATE: 2001-02-16  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 78614  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 28230  
 ; LENGTH: 3519  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium tuberculosis  
 ; US-10-282-122A-28230

Query Match 98.9%; Score 697.4; DB 13; Length 3519;  
 Best Local Similarity 99.9%; Pred. No. 4,1e-168;  
 Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 CCCAGGACGTGGAGCGGATCAACCGCAGACGTTGATCAACATCCGGCGCGTGGTCCGCG 60  
 Db 1199 CCCAGGACGTGGAGCGGATCAACCGCAGACGTTGATCAACATCCGGCGCGTGGTCCGCG 1258

Qy 61 CGATCAAGGAGTTCTTGGCCACGACGATGAGCCAAATTCATGGACAGAAACAACCCGC 120  
 Db 1259 CGATCAAGGAGTTCTTGGCCACGACGATGAGCCAAATTCATGGACAGAAACAACCCGC 1318  
 Qy 121 TGTTCGGGTTGACCCCAAGCGCGACTGTTCGGCGCTGGGGCCCGCGGTCTGTTCACGTG 180  
 Db 1319 TGTTCGGGTTGACCCCAAGCGCGACTGTTCGGCGCTGGGGCCCGCGGTCTGTTCACGTG 1378  
 Qy 181 AGCGTCCGGGCTGGAGGTCGGGACGTCGACCGCTGCGACTACGCGCGGATGTGCCCGA 240  
 Db 1379 AGCGTCCGGGCTGGAGGTCGGGACGTCGACCGCTGCGACTACGCGCGGATGTGCCCGA 1438  
 Qy 241 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTACGCGCGG 300  
 Db 1439 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTACGCGCGG 1498  
 Qy 301 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGAAGGTGGTCGACGCGGTGTTAGCG 360  
 Db 1499 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGAAGGTGGTCGACGCGGTGTTAGCG 1558  
 Qy 361 ACGAGATCGTGTACCTGACCGCGCAGCAGGAGGACCGCCACGTGGTGCACAGSCCAATT 420  
 Db 1559 ACGAGATCGTGTACCTGACCGCGCAGCAGGAGGACCGCCACGTGGTGCACAGSCCAATT 1618  
 Qy 421 CGCGATCGATGCGGACGCTCGCTTCGTCGAGCGCGCGCTGCTGTCGCGCGCAAGCGG 480  
 Db 1519 CGCGATCGATGCGGACGCTCGCTTCGTCGAGCGCGCGCTGCTGTCGCGCGCAAGCGG 1678  
 Qy 481 GCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGACGTCTCGCCCCCGCAGA 540  
 Db 1679 GCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGACGTCTCGCCCCCGCAGA 1738  
 Qy 541 TGTGTTCGGTGGCCACCGCGATGATTCGCTTCTTGGAGCAGCAGCGCAACCGTGC 600  
 Db 1739 TGTGTTCGGTGGCCACCGCGATGATTCGCTTCTTGGAGCAGCAGCGCAACCGTGC 1798  
 Qy 601 TCATGGGGGAAACATGACGCGCAGCGCGTTCGCTGCTCGGTAGCAGGCGCCCGCTGG 660  
 Db 1799 TCATGGGGGAAACATGACGCGCAGCGCGTTCGCTGCTCGGTAGCAGGCGCCCGCTGG 1858  
 Qy 661 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGG 699  
 Db 1859 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGG 1897

RESULT 6  
 US-09-285-306-29  
 ; Sequence 29, Application US/09285306A  
 ; Publication No. US20020187467A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Gingeras, Thomas  
 ; APPLICANT: Drenkow, Jorg  
 ; APPLICANT: Affymetrix, Inc.  
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences  
 ; FILE REFERENCE: 018547-018570US  
 ; CURRENT APPLICATION NUMBER: US/09/285,306A  
 ; CURRENT FILING DATE: 1999-04-02  
 ; EARLIER APPLICATION NUMBER: US 60/080,616  
 ; EARLIER FILING DATE: 1998-04-03  
 ; NUMBER OF SEQ ID NOS: 181  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 29  
 ; LENGTH: 687  
 ; TYPE: DNA  
 ; ORGANISM: Mycobacterium bovis  
 ; US-09-285-306-29

Query Match 97.4%; Score 687; DB 9; Length 687;  
 Best Local Similarity 100.0%; Pred. No. 1.9e-165;  
 Matches 687; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 11 GGAGCGGATCACCGCAGACGTTGATCAACATCCGGCGCGTGGTCCGCGGATCAAGA 70





```
;
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-940-925A-135

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 2.1e-148;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGGCGGTGGTCCGCGCATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 95
Db 1 ATCAACATCCGGCGGTGGTCCGCGCATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 60

Qy 96 CAATTTCATGACACAGAACAAACCCGCTGTCCGGGTTGACCCACAAAGCCGCACTGTCGGCG 155
Db 61 CAATTTCATGACACAGAACAAACCCGCTGTCCGGGTTGACCCACAAAGCCGCACTGTCGGCG 120

Qy 156 CTGGGGCCGGCGTGTCTGTCACGTGAGGTCCGGGTGAGGTCCGGAGCTGCGAGCTGACCCG 215
Db 121 CTGGGGCCGGCGTGTCTGTCACGTGAGGTCCGGGTGAGGTCCGGAGCTGCGAGCTGACCCG 180

Qy 216 TCGCACTACGCGCGGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 335
Db 241 GGCTCGCTGTGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 300

Qy 336 AAGTGTGTGACGCGGTGTAGCGAGATCGTGTACCTGACCGCGCGAGAGGAGGAC 395
Db 301 AAGTGTGTGACGCGGTGTAGCGAGATCGTGTACCTGACCGCGCGAGAGGAGGAC 360

Qy 396 CGCCACGTGTGGCACAGGCCAATTCCGCCGATCGATCGGAGCTGCTTCTGTCGAGCGG 455
Db 361 CGCCACGTGTGGCACAGGCCAATTCCGCCGATCGATCGGAGCTGCTTCTGTCGAGCGG 420

Qy 456 CGCTGTGTGTTCGCGCGGAGGCGGAGGTGAGTACGTGAGTACGTGCGCTCTGTCGAGGTGAC 515
Db 421 CGCTGTGTGTTCGCGCGGAGGCGGAGGTGAGTACGTGAGTACGTGCGCTCTGTCGAGGTGAC 480

Qy 516 TACATGACGTCTCGCCCCCGCAGATGCTGCTGCGTGGCCACCGGATGATTCCTTCTG 575
Db 481 TACATGACGTCTCGCCCCCGCAGATGCTGCTGCGTGGCCACCGGATGATTCCTTCTG 540

Qy 576 GAGCACGACGACGACCAACCGTGCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCGG 635
Db 541 GAGCACGACGACGACCAACCGTGCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCGG 600

Qy 636 CTGTCTCGTAGCGAGGCCCC 655
Db 601 CTGTCTCGTAGCGAGGCCCC 620

RESULT 9
US-09-940-925A-138/c
; Sequence 138, Application US/09940925A

; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-940-925A-138

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 2.1e-148;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGGCGGTGGTCCGCGCATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 95
Db 620 ATCAACATCCGGCGGTGGTCCGCGCATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 561

Qy 96 CAATTTCATGACACAGAACAAACCCGCTGTCCGGGTTGACCCACAAAGCCGCACTGTCGGCG 155
Db 560 CAATTTCATGACACAGAACAAACCCGCTGTCCGGGTTGACCCACAAAGCCGCACTGTCGGCG 501

Qy 156 CTGGGGCCGGCGTGTCTGTCACGTGAGGTCCGGGTGAGGTCCGGAGCTGCGAGCTGACCCG 215
Db 500 CTGGGGCCGGCGTGTCTGTCACGTGAGGTCCGGGTGAGGTCCGGAGCTGCGAGCTGACCCG 441

Qy 216 TCGCACTACGCGCGGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GGCTCGCTGTGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 335
Db 380 GGCTCGCTGTGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 321

Qy 336 AAGTGTGTGACGCGGTGTAGCGAGATCGTGTACCTGACCGCGCGAGAGGAGGAC 395
Db 320 AAGTGTGTGACGCGGTGTAGCGAGATCGTGTACCTGACCGCGCGAGAGGAGGAC 261

Qy 396 CGCCACGTGTGGCACAGGCCAATTCCGCCGATCGATCGGAGCTGCTTCTGTCGAGCGG 455
Db 260 CGCCACGTGTGGCACAGGCCAATTCCGCCGATCGATCGGAGCTGCTTCTGTCGAGCGG 201
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Qy	456	CGCGTGTGTCGCGCGCAAGCGGGCGAGTGGAGTACGTGCCCTCGCTGAGTGGAC	515
Db	200	CGCGTGTGTCGCGCGCAAGCGGGCGAGTGGAGTACGTGCCCTCGCTGAGTGGAC	141
Qy	516	TACATGACGTCTCGCCCGCCAGATGATGTCGGTGGCCACGGCGATATTCCTTCCTG	575
Db	140	TACATGACGTCTCGCCCGCCAGATGATGTCGGTGGCCACGGCGATATTCCTTCCTG	81
Qy	576	GAGCACGACGACGGCAACCGCTGCCCTCATGGGGGCAAAATGACAGCGCCAGGCGGTGCG	635
Db	80	GAGCACGACGACGGCAACCGCTGCCCTCATGGGGGCAAAATGACAGCGCCAGGCGGTGCG	21
Qy	636	CTGGTCGGTAGCGAGGCCCC	655
Db	20	CTGGTCGGTAGCGAGGCCCC	1

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RESULT 10
US-09-941-193A-135
; Sequence 135, Application US/09941193A
; Publication No. US20030108873A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS

```

	Query Match	87.9%	Score 620;	DB 10;	Length 620;
	Best Local Similarity	100.0%;	Pred. No. 2.1e-148;		
	Matches 620;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	36	ATCAACATCCGGCGGTGTCGGCGCGATCAAGGAGTTC	TCGCGACCAAGCCAGCTGAGC	95	
Db	1	ATCAACATCCGGCGGTGTCGGCGCGATCAAGGAGTTC	TCGCGACCAAGCCAGCTGAGC	60	
QY	96	CAATTCATGACAGACAACACCGCTCTCGGGTTGACCC	CAAGCGCGGACTGTCGCGC	155	
Db	61	CAATTCATGACAGACAACACCGCTCTCGGGTTGACCC	CAAGCGCGGACTGTCGCGC	120	

QY	156	CTGGGGCCCGCGGTCTGTACGTGAGCGTCCCGGGCTGGAGGTCCGGAGTGCACCGG	215
DB	121	CTGGGGCCCGCGGTCTGTACGTGAGCGTCCCGGGCTGGAGGTCCGGAGTGCACCGG	180
QY	216	TCCCACTACGGCGGATGTCCCGATCGAAACCCCTGAGGGGGCCCAACATCGGTCTGATC	275
DB	181	TCCCACTACGGCGGATGTCCCGATCGAAACCCCTGAGGGGGCCCAACATCGGTCTGATC	240
QY	276	GGCTCGTCTCGGTGTACGGCGGGTCAACCCCGTTCCGGTTTCATCGAAACGCCGTACCGC	335
DB	241	GGCTCGTCTCGGTGTACGGCGGGTCAACCCCGTTCCGGTTTCATCGAAACGCCGTACCGC	300
QY	336	AAGTGTGTGACGGCGTGGTTAGCGACGAGATCGTGACTGACCGCGACGAGAGGAC	395
DB	301	AAGTGTGTGACGGCGTGGTTAGCGACGAGATCGTGACTGACCGCGACGAGAGGAC	360
QY	396	CGCCACGTGTGTGCACAGGCCAATTCGCCGATCGATCGGACGCTCGCTTCGTGAGCGG	455
DB	361	CGCCACGTGTGTGCACAGGCCAATTCGCCGATCGATCGGACGCTCGCTTCGTGAGCGG	420
QY	456	CGCGTCTGTGTCCGCCCAAGGGCGGGCGAGGTGAGTACGTGCGCTCGTCTGAGTGGAC	515
DB	421	CGCGTCTGTGTCCGCCCAAGGGCGGGCGAGGTGAGTACGTGCGCTCGTCTGAGTGGAC	480
QY	516	TACATGACGTCTCGCCCGCCAGATGGTGTCCGTGCGCACCGCGATGATTCCTTCCTG	575
DB	481	TACATGACGTCTCGCCCGCCAGATGGTGTCCGTGCGCACCGCGATGATTCCTTCCTG	540
QY	576	GACACGACACGCCACCGTGCCTCATGCGGGCAACATGACAGCGCCAGGCGGTGCCG	635
DB	541	GACACGACACGCCACCGTGCCTCATGCGGGCAACATGACAGCGCCAGGCGGTGCCG	600
QY	636	CTGGTCCGTAGCGAGGCCCC	655
DB	601	CTGGTCCGTAGCGAGGCCCC	620

RESULT 11

US-09-941-193A-138/c

; Sequence 138, Application US/09941193A

; Publication No. US20030108873A1

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/941,193A

FILING DATE: 28-Aug-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

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; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-941-193A-138

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 2.1e-148;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 95
Db 620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 561

Qy 96 CAATTTCATGACACAGAACACCCCGCTGTCGGGGTTGACCCACAGCCCGACTGCGCG 155
Db 560 CAATTTCATGACACAGAACACCCCGCTGTCGGGGTTGACCCACAGCCCGACTGCGCG 501

Qy 156 CTGGGGCCCGCGGTCTGTACGTGAGCGTGCAGCGGTGAGAGTCCGAGAGTGCACCG 215
Db 500 CTGGGGCCCGCGGTCTGTACGTGAGCGTGCAGCGGTGAGAGTCCGAGAGTGCACCG 441

Qy 216 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCG 335
Db 380 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCG 321

Qy 336 AAGTGTGTACGCGCGTGTGAGCGAGATCGTGTACCTGACGCGCGAGAGAGGAC 395
Db 320 AAGTGTGTACGCGCGTGTGAGCGAGATCGTGTACCTGACGCGCGAGAGAGGAC 261

Qy 396 CGCCACGTGTGGCACAGGCCAATTCGCGATCATGCGAGCGTTCGTTCTGTCGAGCG 455
Db 260 CGCCACGTGTGGCACAGGCCAATTCGCGATCATGCGAGCGTTCGTTCTGTCGAGCG 201

Qy 456 CGCTGTGTGTCCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 515
Db 200 CGCTGTGTGTCCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 141

Qy 516 TACATGACGTCTGCGCGCGCAGATGTTGCGTGGCCACCGAGATTCCTTCTG 575
Db 140 TACATGACGTCTGCGCGCGCAGATGTTGCGTGGCCACCGAGATTCCTTCTG 81

Qy 576 GAGCAGCAGCAGCAACCGTGCCTCATGGGGCAAAACATGACGCGCGAGCGGTGCG 635
Db 80 GAGCAGCAGCAGCAACCGTGCCTCATGGGGCAAAACATGACGCGCGAGCGGTGCG 21

Qy 636 CTGTCCTGTAGCGAGGCCCC 655
Db 20 CTGTCCTGTAGCGAGGCCCC 1

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RESULT 12

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US-09-940-925A-136
; Sequence 136, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

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; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940.925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 136:
US-09-940-925A-136

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Query Match      87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 5.4e-148;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 95
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 60

Qy 96 CAATTTCATGACACAGAACACCCCGCTGTCGGGGTTGACCCACAGCCCGACTGCGCG 155
Db 61 CAATTTCATGACACAGAACACCCCGCTGTCGGGGTTGACCCACAGCCCGACTGCGCG 120

Qy 156 CTGGGGCCCGCGGTCTGTACGTGAGCGTGCAGCGGTGAGAGTCCGAGAGTGCACCG 215
Db 121 CTGGGGCCCGCGGTCTGTACGTGAGCGTGCAGCGGTGAGAGTCCGAGAGTGCACCG 180

Qy 216 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCG 335
Db 241 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCG 300

Qy 336 AAGTGTGTACGCGCGTGTGAGCGAGATCGTGTACCTGACGCGCGAGAGAGGAC 395
Db 301 AAGTGTGTACGCGCGTGTGAGCGAGATCGTGTACCTGACGCGCGAGAGAGGAC 360

Qy 396 CGCCACGTGTGGCACAGGCCAATTCGCGATCATGCGAGCGTTCGTTCTGTCGAGCG 455
Db 361 CGCCACGTGTGGCACAGGCCAATTCGCGATCATGCGAGCGTTCGTTCTGTCGAGCG 420

Qy 456 CGCGTGTGTGTCCGCGCGCAGAGTGTGAGTACGTGCCCTCGTCTGAGGTGAC 515
Db 421 CGCGTGTGTGTCCGCGCGCAGAGTGTGAGTACGTGCCCTCGTCTGAGGTGAC 480

Qy 516 TACATGACGTCTGCGCGCGCAGATGTTGCGTGGCCACCGAGATTCCTTCTG 575
Db 481 TACATGACGTCTGCGCGCGCAGATGTTGCGTGGCCACCGAGATTCCTTCTG 540

Qy 576 GAGCAGCAGCAGCAACCGTGCCTCATGGGGCAAAACATGACGCGCGAGCGGTGCG 635
Db 541 GAGCAGCAGCAGCAACCGTGCCTCATGGGGCAAAACATGACGCGCGAGCGGTGCG 600

Qy 636 CTGTCCTGTAGCGAGGCCCC 655

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Db 601 CTGGTCGTAGCGAGGCCCC 620  
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RESULT 13  
US-09-940-925A-137  
; Sequence 137, Application US/09940925A  
; Publication No. US20030054338A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; LYAMICHEV, VICTOR I.  
; OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA: US/09/940,925A  
; FILING DATE: 10-Jun-2002  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 137:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 620 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 137:  
US-09-940-925A-137  
Query Match 87.7%; Score 618.4; DB 10; Length 620;  
Best Local Similarity 99.8%; Pred. No. 5.4e-148;  
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 36 ATCAATCCGGCCGGTGTCCCGCGATCAAGAGATTCTTCGGCACCGACGAGTGAGC 95  
Db 1 ATCAATCCGGCCGGTGTCCCGCGATCAAGAGATTCTTCGGCACCGACGAGTGAGC 60  
QY 96 CAATTATGAGCAGAAACAAACCGGTGTCCGGGTGACCCACAGCGCGACTGTCCGG 155  
Db 61 CAATTATGAGCAGAAACAAACCGGTGTCCGGGTGACCCACAGCGCGACTGTTCGG 120  
QY 156 CTGGGGCCGGGGTCTGTCAAGTGGAGTGTCCGGGTGGAGTCCGGACGTGCACCG 215  
Db 121 CTGGGGCCGGGGTCTGTCAAGTGGAGTGTCCGGGTGGAGTCCGGACGTGCACCG 180  
QY 216 TCGCACTAGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275  
Db 181 TCGCACTAGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240  
QY 276 GGCTCGCTGTGTAGCGGGGTCAACCGGTTCGGGTTCATCGAAACCGCGTACCGC 335  
Db 241 GGCTCGCTGTGTAGCGGGGTCAACCGGTTCGGGTTCATCGAAACCGCGTACCGC 300  
QY 336 AAGTGTGTGACGGCGTGTGTAGCGAGAGATCGTGTACCTGTGACCGCGACGAGGAGC 395  
Db 301 AAGTGTGTGACGGCGTGTGTAGCGAGAGATCGTGTACCTGTGACCGCGACGAGGAGC 360  
QY 396 CGCACGTGTGTGACAGCGCAATTCCCGATCGATCGGACGGTTCGTTCTGAGCCG 455  
Db 361 CGCACGTGTGTGACAGCGCAATTCCCGATCGATCGGACGGTTCGTTCTGAGCCG 420  
QY 456 CGCGTGTGTGTCCCGCGCAAGGGCGGAGTGGAGTACGTGCGCTCTGAGGTGAC 515  
Db 421 CGCGTGTGTGTCCCGCGCAAGGGCGGAGTGGAGTACGTGCGCTCTGAGGTGAC 480  
QY 516 TACATGAGCTGTCCCGCGCGCGCGAGATGTTGCGTGGCCACCGGATGATTCCTTCTG 575  
Db 481 TACATGAGCTGTCCCGCGCGCGCGAGATGTTGCGTGGCCACCGGATGATTCCTTCTG 540  
QY 576 GAGCAGCAGCAGCGCCAAACCGTGCCTCATGGGGGCAAAACATGCGCCAGCGGTCGCG 635  
Db 541 GAGCAGCAGCAGCGCCAAACCGTGCCTCATGGGGGCAAAACATGCGCCAGCGGTCGCG 600  
QY 636 CTGGTCCGTAGGAGGCCCC 655  
Db 601 CTGGTCCGTAGGAGGCCCC 620  
RESULT 14  
US-09-940-925A-139/c  
; Sequence 139, Application US/09940925A  
; Publication No. US20030054338A1  
; GENERAL INFORMATION:  
; APPLICANT: BROW, MARY ANN D.  
; LYAMICHEV, VICTOR I.  
; OLIVE, DAVID M.  
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
; PATHOGENS  
; NUMBER OF SEQUENCES: 165  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
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; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA: US/09/940,925A  
; FILING DATE: 10-Jun-2002  
; CLASSIFICATION: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: FORS-01756  
; TELECOMMUNICATION INFORMATION:  
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; INFORMATION FOR SEQ ID NO: 139:  
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US-09-940-925A-139  
Query Match 87.7%; Score 618.4; DB 10; Length 620;  
Best Local Similarity 99.8%; Pred. No. 5.4e-148;  
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 36 ATCAATCCGGCCGGTGTCCCGCGATCAAGAGATTCTTCGGCACCGACGAGTGAGC 95

